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CIRCULARS AND PRICE-LISTS.

HOW TO DISTRIBUTE THEM TO THE DRUG-TRADE.

MANY of the best advertisers in the drug-trade have endorsed our view that it is more effective as well as cheaper to distribute circulars and price-lists stitched up in THE CHEMIST AND DRUGGIST than sending them singly by post. We make such insets in the C. & D. notable by the fact that we only receive them twice a year for distribution, and, of course, we ensure that they get into the hands of the right people. Sending them singly by post is more or less (principally "more") a lottery, gives immense office trouble, and costs at least three times more than our charge for inserting them in the C. & D. We would advise those who think of the matter to write to our Publisher for particulars about the next distribution—the Summer number, July 28, 1900. He will not only give particulars about the charges, but what artistic assistance he can in designing or arranging insets. The date is two months distant, but near enough for prompt instructions to printers.

Summary.

THE LATEST STORE-PRICES are given on p. 948.

THE SANDALWOOD DISTRICT of India is briefly described, with a map, on p. 968.

WE GIVE PORTRAITS of five chemists who were in Kimberley during the siege (p. 957).

EDUCATION is the remedy for the ills that affect pharmacy, says a correspondent on p. 976.

THE MARKETS are very quiet this week, and no changes of importance are recorded (p. 979).

DR. EDWARD BERDOE gives reasons for pool-pooling the anti-alcoholic serum treatment (p. 975).

AN EDINBURGH MINOR CANDIDATE describes what the last examination there was like (p. 972).

A NUMBER of CHEMISTS are getting the honorary degree of D.Sc. of the Victoria University (p. 948).

WE SEEM to RECOGNISE Dr. John Attfield hopping in the pharmaceutical aviary this week (p. 962).

THE TEXT of the antipyrin trade-mark judgment in Paris is given by our French correspondent (p. 951).

A NEW THEORY in regard to the constitution of turpenes has been propounded by Semmler, and is noted on p. 965.

SKIN-DISEASES in animals are the subject of a short series of articles by M.R.C.V.S., the first of which is printed on p. 959.

THE MANCHESTER CORONER says that chemists should see that their registered addresses are correct, and we agree with him (p. 967).

XRAYSER comments upon the entertainment provided by the General Medical Council meetings and on advertising dentists (p. 963).

A MEDICAL AND HYGIENIC EXHIBITION has been held in London this week, and we mention some of the exhibits in a report on p. 970.

SOME MEMBERS of the Wilts. County Council object to the way in which retailers have been summoned for selling alum baking-powder (p. 949).

IT IS SUGGESTED that a fund to carry the advertising-dentists' case to the High Court should be formed. Letters on the subject appear on p. 975.

IT IS PROPOSED in Canada to more thoroughly control the patent-medicine trade, and a piece of legislature on the subject is referred to on p. 953.

CRYSTAL PYROGALLOL, blue focussing-screens, photographing at the Paris Exhibition, and a new restrainer are dealt with under Photographic Notes (p. 971).

DR. J. C. MCWALTER has been making tinctures and determining their specific gravities, which are compared with those recorded by Mr. J. C. Umney (p. 959).

AN ANALYSIS of the "smear" on a Boer cartridge shows that it is paraffin wax, the mineral matter being oxidised copper and nickel resulting from long storage (p. 963).

A CORRESPONDENT sends us some remarkable statistics regarding the deaths from chloroform, showing the need for greater carefulness on the part of anaesthetists (p. 975).

OTTO of ROSE is one of the most expensive and most adulterated of essential oils. Mr. Henry Garnett gives the cream of his experience in testing it in an article on p. 961.

A WAR CORRESPONDENT sends us further intelligence regarding pharmaceutical experiences at the front (p. 957), and we record the death of another young Service pharmacist (p. 958).

THE NEW UNIVERSITY has been exciting Birmingham, and a correspondent there reflects the pharmaceutical feeling in the matter. A pharmacist is treasurer of the University (p. 948).

IT IS SHOWN in an article on the Medical Preliminary examination that the attempt of the General Medical Council to raise the standard was a theoretical consideration unjustified by the education of the country (p. 966).

THE CAPE CHEMISTS' ENTERTAINMENT to Mr. W. Martindale is fully reported on p. 954. Mr. Martindale is home now, and has informed a C. & D. representative that he does not seek the Pharmaceutical Society presidency again (p. 956).

THE GENERAL MEDICAL COUNCIL concluded its Summer Session last week with a consideration of the Royal College's recognition of elementary school studies as part of the professional curriculum. The receipts and expenditure of the 1898 B.P. were also submitted, and the statement is printed on p. 969.

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

The Pharmaceutical Council did not meet in Bloomsbury Square this week, but will next Wednesday, June 13.

A Swansea publican who was in the habit of inhaling chloroform failed last week to recover from the inhalation.

Birkenhead has added one to the carbolic negligence record. The wife of a carpenter there committed suicide with the corrosive fluid last week.

The Derby Board of Guardians has accepted the tender of Messrs. Davies, Gibbins & Co., of Bridge Street, Derby, for the supply of drugs to the workhouse.

The Liverpool Chemists' Association have inaugurated a series of bicycle runs for the first Thursday in each month during the summer. The meeting-place is the Lodges Lane and Ullet Road entrance to Sefton Park.

A Bolton joiner recovered from carbolic poisoning nine years ago. He took the acid then in mistake for fever-curer. He died at the Bolton Infirmary last week a few hours after a carbolic draught, taken intentionally on this occasion.

In an action brought at the Bow County Court Messrs. Edward Cook & Co. (Limited), of the East London Soap-works, have had to pay 52*l.* compensation and costs to a workman who damaged his hand in a cog-wheel on their premises.

A Bushbury fitter picked a ginger-beer bottle out of a number that were in his house, and had a drink from it. It contained carbolic acid. He was able to stagger to Dr. Burke's surgery, and died there, while the doctor was endeavouring to avert death. This happened last week.

The Wigan and District Chemists' Association have decided that the pharmacies in the district shall be closed at 1 P.M. on Wednesdays all the year round in future. Hitherto a few Wednesdays have not been observed as a half-holiday.

The local Early-closing Association, as the result of a recent canvass, induced the chemists and druggists of St. Helier to keep their pharmacies closed between noon and 7 P.M. on Whit-Monday. The same arrangement will probably be made on all succeeding bank-holidays.

Sir Henry Roscoe was unable, owing to illness, to personally deliver his lecture on "Bunsen" to the Royal Institution on the evening of June 1, and Sir William Crookes did it for him. The lecture covered the ground which Sir Henry travelled in his lecture to the Chemical Society, which was fully reported in THE CHEMIST AND DRUGGIST some weeks ago.

Store-prices.

The C.S.S. Association (Limited) notify the following:—

Advanced.—Eye-baths, from 5*d.* to 6*d.*; Allnut's fumigating-paper, from 3½*d.* to 4*d.* per packet; Gazogene measures, from 6*d.* to 8*d.* and 10*d.* to 1*s.*, according to size; Bunter's nerrine, from 11*d.* to 11½*d.*; Angier's petroleum emulsion, 2*s.* 1*d.* to 2*s.* 3*d.* and 3*s.* 7*d.* to 3*s.* 9*d.* per bottle; Pinand's brilliantine, 10½*d.* to 1*s.* and 1*s.* 2*d.* to 1*s.* 4*d.*; and pommade Hongroise, 10*d.* to 1*s.* per bottle.

Victoria University Science Degrees.

The Victoria University is to confer the honorary D.Sc. on Lord Rayleigh, Sir William Abney, Professor A. Michelson (University of Chicago), Professor H. A. Rowland (Johns Hopkins University), Professor E. Pickering (Harvard University), Professor J. J. Thomson, Dr. T. E. Thorpe, Mr. Henry Wilde, Professor Dewar, Sir William Huggins, Sir W. C. Roberts-Austen, Mr. R. T. Glazebrook, and Professor A. R. Forsyth. It was resolved that agriculture is in future to be a subject for the B.Sc. degree.

Cricket.

Northern College v. Manchester College.—Played at Birch Field's Park on June 2. Scores: Northern, 68; Manchester, 75 for two wickets. Goodyear (32) and James (25 not out) batted well for the winners, and Rushton and Evans for the defeated side.

Notes from a Birmingham Correspondent.

Pharmacy was poorly represented at the first meeting of the University of Birmingham when the charter was officially received last week.

This is a matter of surprise, seeing that there has been for some months past such a lot of coquetting between the powers that be and those that would be (in pharmacy).

Perhaps the local brotherhood do not quite like to definitely decide between the rate-aided Technical School and the State-aided University College, until it knows what is to be done by either both or neither.

Dr. Windle has taken time by the forelock and obtained the formal sanction of the Medical Council to accept the schedule to be adopted by the University at its Matriculation examination as evidence of sufficient training in arts. Has the same been presented for consideration to the Pharmaceutical Society?

Mr. Alderman Francis Corder Clayton, pharmaceutical chemist, has been appointed Pro Vice-Chancellor and Treasurer of the new University, the Lord Mayor being the Vice-Chancellor, and the great "J. C." Chancellor. Mr. Clayton, unlike the Chancellor, does not wear an apron, either actually or figuratively.

Considerable surprise is expressed at the City Analyst's unfavourable report on the samples of official preparations purchased from pharmacists under the provision of the Food and Drugs Act. There seems to be something very wrong with local pharmacy when three out of eleven samples of tincture of rhubarb contain saffron and no glycerin when they ought to have contained glycerin and no saffron.

Whilst taking a country walk a youth was observed to have in his hand what was apparently a cake of soap coloured a rich crimson and emitting a most agreeable and powerful perfume. On closer inspection it did not look like soap. Was it a perfumed paraffin-tablet or some new local proprietary of the perfumer's art?

The figures of failures and passes recorded in the *C. & D.* last week do not show the curriculum in a favourable light. In the medical profession, to which your table refers, the curriculum is very stringent, yet the results in some cases are even worse than obtain in the Society's examinations, which, as everybody knows and is thankful for, are *sine curricula*.

The Volunteer officers of the Midlands are having some interesting tutorial lessons in military tactics at Widney Manor, a delightful spot between Solihull and Knowle, and amongst them are several pharmacists, including Colonel Wyley (Messrs. Wyleys, Coventry).

In a report entitled "Midland Securities in June," the local press has prepared a table of the leading commercial securities dealt in on our local Stock Exchange, showing the yield per cent. on the basis of the latest dividends and selling-prices, from which are culled:—Magor's 1*l.* shares, price 1*s.* to 2*s.*; no dividend paid. The same company's 5*l.* shares are worth 1*l.* 5*s.* to 1*l.* 15*s.*, and no dividend paid. Southall's 1*l.* 5-per-cent. shares are worth from 23*s.* 6*d.* to 24*s.* 6*d.*, and thus yield a percentage of 4*l.* 3*s.* 6*d.*

Boating Fatality.

Five young men were drowned off Marsden, on the Durham coast, on June 4, owing to the small pleasure boat in which they were sailing being overturned in a squall. Amongst the five was a chemist's apprentice named Paulson, aged 19, of Tynemouth. The sixth man was able to swim ashore, which he reached in a terribly exhausted condition.

Dental Surgeons in the Services.

At the closing meeting of the British Dental Conference at the Yorkshire College, Leeds, on June 5, Mr. Norman Bennett, of London, said that the recognition of dental surgeons at the War Office and the Admiralty had been left in abeyance by the authorities. For nine years the appointment of dental surgeons in the War Office had been suggested, and attention had been paid to the teeth of recruits since 1885, but the authorities had failed to provide an effective conservative dentistry in the British Army, and the regulations as to dental work had been lamentably deficient. In the Admiralty the dental arrangements were better, but the services of dental surgeons of experience were required. He recommended the further appointment of dental surgeons in

the Services. Between 300 and 400 dentists from different parts of the country attended the conference, 1,200 being now on the membership roll.

Youthful Burglars.

At Ashford (Kent) on June 2, four lads, named Wm. Peters, Thos. Knowles, Alfred Champion, and Albert Swinnerd, were charged with stealing 15s. in money, and three bottles of scent from the shop of Messrs. Walker & Harris, chemists and druggists, Bank Street, Ashford, on the night of May 31. The boys admitted that two of them climbed through the fanlight and committed the robbery whilst the other two stood outside and kept watch. The Magistrate ultimately discharged the boys on the understanding that their fathers would chastise them.

The Bogus Exciseman.

Robert Henry Arnold was charged at Dewsbury on June 1, with obtaining 5s. 11½. by false pretences from Sarah Scholey, of Church Street, Robertstown. Accused represented himself to various persons as being an Inland Revenue officer. He visited the grocer's shop of the prosecutrix, and asked for an infant's powder, for which a charge of one penny was made. He then inquired whether she kept Kaputine powders, and on her giving a negative reply and intimating that a licence was required for their sale, accused said that he was aware of the fact, and at the same time he asked her if she possessed a licence for the sale of infants' powders, adding that if she had not she would have to get one within twenty-four hours. He represented that he could supply her with one for 5s. 10½. Eventually she paid him 5s. 10½., together with a penny for postage. He was arrested on leaving the shop, and in his possession was found an official cap worn to facilitate business. A remand was granted in order that the Somerset House authorities might be communicated with.

Alleged Serious Charge.

At Watford on May 30, a draper's assistant named John Reid was charged with inciting Mr. Norton, chemist and druggist, of Bristol, to procure abortion. Defendant sent a letter addressed to Mr. Norton, chemist, Redcliffe Hill, Bristol, asking him to send him something which would cause a miscarriage. There was no Mr. Norton, chemist, at that address, Mr. Norton's pharmacy being at 214 Gloucester Road. The letter was delivered to Dr. Norton, who promptly placed it in the hands of the police. For the defence it was submitted that there was no offence committed, but the Bench sent defendant for trial.

A Chemist Takes Prussic Acid.

On the morning of May 31 Mr. Edwin Bloomfield, chemist and druggist, 144 The Parade, Leamington, was found lying dead on his bed by one of his assistants. He had taken prussic acid. Recently he had complained of ill-health following influenza. He had also spoken to Dr. Miles Atkinson of financial difficulties owing to betting transactions, but that gentleman having sent him a cheque thought his embarrassment was over. His business was a successful one. Mr. Bloomfield leaves a wife and young family.

A Dishonest Employé.

At the Clerkenwell Police Court William Bishop (30), described as a chemist, of 164 Millfield Road, Lower Clapton, was charged on May 31 with obtaining by false pretences twenty-four boxes of pills, value 2½. 7s., the property of James Crispe, manufacturing chemist. Bishop had been employed by Messrs. Blackham & Co., chemists, with whom the prosecutor did business. He presented to Mr. Crispe's representative several orders for the supply of "Dr. Williams's Pills," and believing the orders to have been written with the authority of Messrs. Blackham, Bishop was supplied with the pills. Subsequently it was discovered that the prisoner had been discharged from Messrs. Blackham's employment, and that the orders were not sent out with their authority. The prisoner when arrested said, "Yes, it's quite true. I have been drinking heavily during the past three months. I sold the pills to a chemist." The prisoner was remanded.

Coroner and Executors' Manager.

At an adjourned inquest on May 31, touching the death of George Sennett, an impoverished actor, who had been found dead in bed from laudanum-poisoning, it was stated that three empty laudanum-bottles had been found on the table in his bedroom, two of which were labelled "Edmund Holt, medical chemist, 268 Deansgate, Manchester," and the other, "Boots, Cash Chemists (Limited)." The manager of Edmund Holt was called as a witness, and examined by the Coroner as follows:—Coroner: What is your name?—Joseph Oakey. Where do you live?—At Weaste. How long have you been the manager of this shop?—Two years. Why have you not registered?—I am registered by the Pharmaceutical Society. Your address is registered in this book as at "157 Liverpool Road, Cadishead." Did you not give notice that you had removed?—No. You ought to have done. We are bound by these addresses. Do you manage this shop for the executors of the late Edmund Holt?—Yes. There is no Holt?—No. How is it your name is not on these bottles, because the Act says the name and address of the seller of the poison are to be put on the label—not the name of a dead person?—I manage the business for the executors. The executors are not members of the Pharmaceutical Society?—No answer. The witness said something about Boots' labels, but the Coroner said he had nothing to do with that. Edmund Holt was dead, and yet his name was on the bottles. "It is not a matter for me to deal with; it is a question for the Home Office." The Coroner then questioned the witness as to the sales of laudanum to the deceased. Mr. Oakey said he served Sennett with twopennyworth of laudanum on May 18 and with threepennyworth on May 19. The man told him it was for his wife for outward application. The Coroner commented strongly upon the witness's lack of forethought. As for the words "medical chemist" on the label, they were absurd. It would be well for chemists to exercise a little more control over these poisons. If they made it difficult for people to get poisons they might preserve life. The jury returned a verdict of suicide whilst insane.

The Sale of Vermin-Killer.

At Romsey, Southampton, Ann Draper, a widow, living with her son, drank a solution of Battle's vermin-killer, of which she had obtained two threepenny packets from Mr. F. Oram, pharmaceutical chemist, Market Place. Mr. Oram required her to sign the poisons-book, and cautioned her as to the use of the poison. The son asked Mr. Oram at the inquest if he did not think it would be better to let mice live than sell strychnine to an old woman, to which Mr. Oram replied in the negative; and the Coroner and jury stated that no blame was attached to him.

Sale of Food and Drugs Act Administration.

At a meeting of the Wilts County Council on the presentation of the analyst's report the matter of the prosecution of small shopkeepers for the sale of baking-powder containing alum was discussed. Mr. Withy said that immediately the Act came into operation inspectors were sent round purchasing samples of baking-powder and ordered to take proceedings. He thought it would have been more dignified if some intimation had been given to shopkeepers so that they could have got rid of the adulterated article. The Chairman of the Sanitary Committee said it was outside the power of the Council or the Sanitary Committee to say what fines should be inflicted. He maintained that it would have been a dangerous precedent to issue a caution to shopkeepers, because they would have come before the Court and said, "We have been warned upon this and that point, but upon the point on which you wish to proceed we have received no warning," and a conviction would never be obtained. Mr. M. H. N. Storey-Maskelyne condemned the imputation that any shopkeeper in Swindon or the northern part of the county had been persecuted. The committee had never had any names before them. The samples and reports were submitted with numbers attached, and it was upon those numbers that they decided whether proceedings should be taken or not. The discussion then dropped.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Personal.

Mr. Robert Barklie, F.I.C., Fountain Street, Belfast, has been appointed analyst to the Belfast Union.

At the annual Conference on June 3 of the United Kingdom Commercial Travellers' Association, Sir Henry Cochrane, D.L., director of Thacker & Hoffe's chemical and drug establishment, Dublin, was unanimously re-elected President for the ensuing year.

L.G.B. and Drug-tenders.

The Local Government Board has sent a circular letter to most of the poor-law unions in Ireland requesting to be furnished with a statement in each case, showing the tenders received for supplies of drugs and medical-appliances, and the abatement offered in each tender off the prices laid down in the official list.

Defective Drugs.

The Local Government Board have directed the Guardians of the Carrick Union to obtain an explanation from the drug-contractor in regard to alleged defects in the supply of compound tincture of gentian and tincture of iron perchloride, and further direct that the drugs in question be returned to the contractor, and fresh supplies of the standard quality be obtained in lieu thereof.

Action against Dublin Chemists.

An action has been commenced in the Queen's Bench Division at Dublin, in which Mr. W. H. Moore sues Messrs. Nagle, and Leonard & Co., chemists and druggists, Dublin, to recover the sum of 89*l.* 17*s.* 1*d.*, balance alleged to be due for building work done on the premises 28 Bolton Street, Dublin. The contract was made between Nagle and the plaintiff. It was then discovered that Nagle was only a manager for Leonard & Co., and that the work was really done for them.

A Pharmacist on Lymph Circulation.

At the last meeting of the Royal Academy of Medicine in Ireland, held on Friday, June 1, Mr. James S. Ashe, R.P.S.I., read a paper (by request) entitled, "Note on the Lymph-circulation." In his remarks Mr. Ashe introduced a new theory, of which he is the originator, and which is of great physiological interest. The Chairman (Professor Cunningham, Trinity College) thanked Mr. Ashe for coming to show them his discovery, and after the meeting Mr. Ashe demonstrated his theory by means of instruments. Mr. Ashe only left the ranks of pharmacy two years ago; he is now demonstrator in pharmacy, materia medica, and histology at the Royal College of Surgeons, Ireland.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The Outcome of a Hold-up.

William Gordon, the young man who induced a chemist's assistant at Leith to hand over the contents of the till by threatening to shoot him with a revolver, has been sent to prison for eight months.

Business Change.

Mr. Robert Cairnie has acquired the old-established business of chemists and druggists carried on at 13 Castle Street, Inverness, by Messrs. Macleod & Galloway, formerly Galloway & Son, and Macleod, of which Mr. Lewis Macleod was sole partner. Mr. Cairnie will carry on the business under the name of Galloway & Co.

Edinburgh Pharmacy S.C.

The swimming section of the Edinburgh Pharmacy Athletic Club held the first of a series of handicaps on June 4. Result: 1. A. G. Paterson; 2. L. S. Lamb; 3. D. B. Kidd. A close race, won by inches only. The next handicap takes place on July 2.

Edinburgh Chemists' Picnic.

The annual picnic of the Edinburgh Chemists' Association will be held this year at the beautiful district of Aberfoyle on June 13. A special train will leave the Waverley Station at 9 A.M., reaching Aberfoyle at 11.15. Dinner will be provided, and tea served between 3.30 and 5 P.M., the return train leaving for Edinburgh at 7 o'clock. Early application for tickets is desirable, and anyone connected with pharmacy will be welcome to join the excursion. Mr. Claude F. Henry, 1 Brandon Terrace, Edinburgh, is the Hon. Secretary.

An Inquest and Scotch Verdict.

There are no coroners in Scotland, but their equivalent exists under the Fatal Accidents Inquiries (Scotland) Act, which deposes the local sheriffs and juries to inquire into industrial and other fatal accidents. There was such an inquiry last week, at Ayr, by Sheriff Orr Paterson and a jury, regarding the death of William Elliot, chemical-worker, in the employment of William Henderson & Co. (Limited), chemical-works, Irvine, who died on April 5 from injuries alleged to have been sustained at the works on March 30 in the course of the manufacture of bleaching-powder. Elliot had been "gassed" when cleaning out the stills, and this was said to be the first accident of the kind. Mr. J. D. Moonie, the company's chemist, admitted in evidence that the iron and zinc shovels with which the men lifted the residuum in the still might give rise to arseniuretted hydrogen in such quantities as to make it dangerous to life. Deceased had come out of the still showing signs of exhaustion, and complaining of sickness and a sweet taste in his mouth. Dr. W. A. Paterson, Irvine, who attended deceased, was of opinion that he had died from arsenical poisoning. Dr. Legge, Home Office Inspector, stated that he had come to the conclusion that Elliot had met his death from arseniuretted hydrogen, inhaled by him while cleaning out the still as described, but the jury was non-committal in giving a verdict of death by inhaling a poisonous gas.

Cheap Lines.

Inman's drug-stores in Edinburgh and Leith, have been the subject of a stocktaking clearance-sale from May 28 to June 9. There are great bargains in all the departments, and the firm have a fifteen-years' record for quality and excellence of goods. The whole stock is treated exactly as a draper regards his goods when he offers them to the public when trade is dull. But there is a variety about the things that strikes one as exceedingly peculiar. The list finishes up with the following special sale-prices for drugs and chemicals:—Alum (lump or powder), 1*d.* per lb.; bromide of potassium, 2*s.* 2*d.* per lb.; camomile-flowers, 9½*d.* per lb.; camphor, 4 oz., 8*d.*; 1 lb., 2*s.* 6*d.*; curry-powder, 1*s.* 2½*d.* per lb.; glycerin, 1-lb. bottle, 9½*d.*; quinine, 1*s.* 10*d.* per 1-oz. bottle.

An Historic Pharmacy.

Messrs. Spence, chemists and druggists, of Linlithgow have purchased the premises at 65, 67, and 69 High Street in that town. For considerably over half a century a chemist's, stationer's and printing business has been carried on in the premises.

"THE HEATHEN CHINEE IS PECULIAR."—It is solemnly asserted in the *Shanghai Mercury* of March 1 that, according to the native papers, the Tsung-li-Yamen, learning that morphia is a poisonous drug, has instructed the Commissioners of Customs at the various ports in China to prohibit its importation. This, no doubt, is intended as a hit at the morphia-injection habit which has been so largely practised in China of late years. If any simple-minded Chinaman is foolish enough to endeavour to start a little private-extraction business on his own account from the vast amount of home-grown crude material, there will possibly be a delicate deterrent available in the hands of local authorities.

French News.

(From our Paris Correspondent.)

FORMALDEHYDE FOR INFLUENZA.—Dr. de Malleree, of Varennes-sur-Allier, has treated his influenza-patients with inhalations of formaldehyde in isolated rooms, where they remained for forty-eight hours. Under its influence the cough ceased immediately, and the fever abated within twelve hours at the latest. At the end of two days the patients were removed to a second room, free from formaldehyde, and one or two days there completed the cure. Dr. de Malleree has never found any relapse after this treatment.

PHOTOGRAPHY OF COLOURS.—At a meeting of members of the International Congress of Professional Photography held last Sunday at the Sorbonne, Paris, some excellent specimens of the photography of colours were shown by M. Lippmann. The eminent professor explained, in the course of a lecture, the theory of colour-photography, and held out hopes that, thanks to new discoveries, it will soon be within reach of amateurs in the same way as ordinary photography. The lecture was illustrated by means of oxyhydrogen-lantern pictures.

TREATMENT OF LEPROSY BY SEROPATHY.—When one injects the blood of a rabbit into a horse, this blood is transformed, toxic substances being produced which make the horse-serum a powerful toxin for the rabbit. M. Metchnikoff, in conjunction with his assistant, Dr. Besredka, has tried a new application of this general method. He has injected a goat with human blood, and has obtained a serum which "dissolves, destroys, and discolours" the red blood-corpuscles with incredible rapidity—less than ten minutes—as well as the blood-poisons hemolysin and leucotoxin. Metchnikoff and Besredka have now tried the serum of their goat on two lepers in Paris hospitals with apparently some measure of "amelioration."

A NINE YEARS' SEQUESTRATION.—Just now the town of Amiens is excited and exceedingly interested in what appears to be an extraordinary case of sequestration discovered there a few days ago. The victim is a woman who has been kept closely confined nine years in a house, and Blue Beard in this case appears to be a commercial traveller named Sarot. The story is that the woman eloped with Sarot in 1884, she being then 18 years of age. Imagination has been rather rife regarding the matter, and it is emphatically stated that her alleged abductor habitually practises hypnotism on young girls. Increased interest in the matter has been aroused by the discovery at Sarot's residence of a stock of bottles of laudanum and other poisons of a more or less deadly character, said to be enough for a chemist's shop.

THE INTERNATIONAL PHARMACOPEIA.—The Belgian Royal Academy of Medicine has addressed a letter to the Paris Academy of Medicine drawing attention to the fact that it would be interesting to approach the leading foreign Governments with a view to bringing about the adoption of an International Pharmacopeia, in which the preparation and composition of potent medicinal preparations should be uniform. This letter was submitted to the French Minister of Public Instruction, who, in his own name and that of the Minister of Foreign Affairs, asked the Paris Academy to consider the subject. The members of the Section of Pharmacy consequently held a meeting recently, with Professor Bourquelot in the chair. Several members drew attention to the fact that the question had been discussed at almost all of the International Congresses of Medicine and Pharmacy in recent years, and is included in the programme of the International Congress of Pharmacy to be held in Paris next August. A vote was passed recognising the great importance of the subject, and that the time is not far off when it may be settled in a practical manner. M. Bourquelot is to be asked to act as the delegate of the Academy at the Pharmacy Congress, he dealing specially with the International Pharmacopeia.

"ANTIPYRINE" AS A TRADE-MARK.—In the *C. & D.* of May 19 reference was made to the recent decision given by the Paris Court of Appeal with regard to the lawsuit which has been going on for some years between the Syndical Chamber of Pharmacists of the Seine and the Société Parisienne de

Couleurs d'Aniline concerning the right of the latter company to the exclusive use of the word "Antipyrine" in virtue of a trade-mark taken out by them. A decision in favour of the company had already been given by a lower Court, but the Court of Appeal gave a contrary judgment, practically on the ground that the name of a pharmaceutical product cannot be protected by a trade-mark when such name is not a fancy word but indicates the scientific nature of the product. As the case is one affecting the question of trade-marks in France, the following details of the recent judgment given against the company will be interesting:—

On January 27, 1897, the Syndical Chamber of Pharmacists of the Seine brought an action against the Sté. Parisienne de Couleurs d'Aniline with the object of nullifying the trade-mark consisting of the word "antipyrine," registered by the company on February 16, 1888. Judgment was given in favour of the company on the ground that the inventor or proprietor of a pharmaceutical product can secure the exclusive right to the use of the name of such product, on the condition, however, that it is not an everyday and necessary article and does not reveal either the nature or special virtue of the product. The Judges of the lower Court considered the word "antipyrine" to be a purely fancy word chosen as such by Dr. Knorr, the inventor of the product, who might have selected any other name. Also the Sté. Parisienne, who control the product in France, have never ceased to claim their right to use the word, so that it cannot be said to have fallen into the public domain. The legal effect of this decision, which is now under appeal, remains to be considered. No pharmaceutical product can be patented in France, but if it can be protected by a trade-mark the effect is to all intents and purposes the same. But in order to make such trade-mark valid the denomination must be purely a fancy one, and not one that would show the special nature or medical virtue of the product indicated. If it were otherwise, every manufacturer of a pharmaceutical product would easily find a way of evading the law. Under these circumstances the only point to be examined is to know whether the word "antipyrine," supposing it to have been regularly registered by the Sté. Parisienne de Couleurs d'Aniline, is a fancy word arbitrarily chosen in view of a legal registration, or if, on the contrary, it was intentionally adopted by Dr. Knorr in order to introduce the product to the medical world, and to answer the requirements of therapeutics. Everything points to the fact that the latter course was adopted by Dr. Knorr; and that the word "antipyrine" was intended to designate clearly a specific remedy against fever, as indicated by its etymology. Antipyrine is also used as an energetic dolorifuge, and as such the Société claims it might have been registered as a trade-mark under the word "analgésie," but this name would have revealed one of the virtues of the product.

The judgment included costs against the Société both for the first hearing and the appeal. The case will probably come before the Court of Cassation, but it does not seem likely that the finding recently given will be revised.

Australasian Letter.

JAPANESE SULPHUR is making way in Australasia. A tender for the supply of crude Japanese sulphur to the Melbourne Board of Works has been accepted at 6*l.* 10*s.* a ton.

COMPLIMENTARY DINNER.—The Pharmacy Board of South Australia and the Council of the Pharmaceutical Society on March 20 entertained the Editor of *The Chemist and Druggist (of Australasia)* to dinner in Adelaide. A short toast list which followed the dinner resulted in many nice things being said of the editor and the journal he edits.

EARLY-CLOSING IN NEW SOUTH WALES.—It is necessary to point out that the police seem to be going beyond their powers in enforcing the new Early-closing Act. In some cases they are asking pharmacists to remove from their cases such things as brush-ware, perfumery, and soaps, after 6 o'clock, the time when other shops have to close. The question whether any particular article forms part of a druggist's regular stock is one of evidence, and in New Zealand it has been decided that chemists may sell photographic cameras and tea or tea-tablets.

AN EDUCATIONAL EXHIBIT.—At the Century Exhibition, Adelaide, Mr. J. H. Young, pharmaceutical chemist, Secretary of the Pharmaceutical Society of S. Australia, and Registrar of the Pharmacy Board, had an exhibit of the medicinal and chemical products of iron. Some pieces of scrap iron, hoop

and bar iron, nails, wire, toy pincers, piece of dumb-bell, a horseshoe, and an old shovel were the starting point, the remains after treatment with acid being shown in the centre of the case. The thirty-four products shown included most of the medical preparations of iron, a printed sheet being displayed with short particulars of each article.

THE BUBONIC PLAGUE is much in evidence in Sydney and fresh cases are reported daily, the total number up to April 2 being seventy, with twenty deaths. Apparently all the cases have originated in one area near the wharves, and over 1,000 men have been inoculated with Haffkine's prophylactic and set to work to cleanse the district. It is alleged that the municipal government of Sydney has been too largely in the hands of property owners who have neglected to carry out necessary sanitary measures which would have meant a drain upon their own pockets. It is asserted that from one small lane seventy-five tons of refuse were removed, although the lane had been previously cleansed by the corporation officials, and that one of the aldermen had declared it to be so clean that he could eat his dinner off almost any part of it. The epidemic has naturally caused a great demand for disinfectants, and has led the authorities in the other colonies to take strict precautions to prevent the introduction of the infection—so far with success. In each colony a crusade has been initiated against rats, and the New Zealand Government has even established depôts where rat-poisons can be obtained gratis. Phosphorus poison seems to be mostly favoured. Most of the municipalities of Melbourne and suburbs pay 2*d.* for each dead rat brought to certain fixed depôts, the bodies being afterwards destroyed by fire. Even in Sydney itself there seems to be nothing approaching a real scare, although the Easter trade has been a disappointment.

South African News.

(From our own Correspondent.)

CAPE COLONY LICENSEES.—Licences have been issued under the provisions of the Medical and Pharmacy Act, 1891, authorising Hermann Kantorowich to practise as a dentist in this colony, and John Priestley Preston and Herbert Henry Wright to practise as chemists and druggists.

A SHORT ARTICLE appears in a Natal paper, written by "Hospital Patient," which gives a pathetic picture of the seamy side of war. After pointing out how very rarely Tommy Atkins gets any glory out of war further than that published in the newspapers about his particular regiment, owing to the selfishness of the officers, he refers to General Buller's recent exception to the rule as instanced in the attempt to save the guns at Colenso by the 7th Battery R.F.A., the men being down to receive the D.S.O. "Hospital Patient" says that enteric and dysentery are by far more death-dealing than the Boer guns. Yet the many recoveries are wonderful to relate, careful attention from the doctor and proper nursing being responsible for the comparatively low death-rate, which was $2\frac{1}{2}$ per cent. during the writer's enforced sojourn in the hospital at Colenso, at a time when most of the staff itself was down with sickness.

VASCO MINERAL-WATER CASE.—This action was heard recently in the Supreme Court at Cape Town between the liquidators of the Platteklouf Syndicate (Limited) and Mrs. Day. The defendant had sold to the Platteklouf Syndicate rights of a mineral-water spring on her property, but after working it for some time the syndicate went into liquidation and ceded their rights to the Vasco Water Company (Limited). Due notice was given to Mrs. Day, but when the rent was tendered in January last she refused to accept it or to give up goods on the property belonging to the former company. Plaintiffs, therefore, claimed delivery and 100% damages. Defendant had since the proceedings commenced accepted the rent. The judge awarded 15% damages and costs up to May 4. In a further action concerning an agreement relating to some water-pipes, damages were assessed at 48%, both parties paying their own costs after the date named.

THE CAPE "CLUB" SODA CASE.—An action was heard at Cape Town on May 8, brought by Thomas H. Pegram to restrain the respondent, George A. Perram, making use of a certain trade-mark—namely, the word "Club"—in connec-

tion with the sale of his aerated soda-waters, and, further, that the respondent should show cause why he should not be made to destroy all labels, invoices, &c., bearing that trade-mark. Plaintiff stated that he had seen defendant's advertisement in the *Cape Argus* and other papers in the following terms:—"Club" soda is our speciality, guaranteed equal to Schweppes. Try it! The Ariston Mineral-water Company, Kenilworth." He thereupon caused a letter to be sent to the respondent, telling him that the word "Club" was not to be used by him as applying to soda-water, it being the registered trade-mark owned by the applicant. Defendant replied that he was not prepared to publish an advertisement in newspapers to that effect, but he would agree to withdraw the sale of "Club" soda and discontinue the use of the trade-mark in future. Evidence was given that defendant continued to sell "Club" soda after undertaking not to do so. Respondent denied that he had continued the sale after learning that the applicant was the registered proprietor of the trade-mark. He substituted the word "Corked" soda-water. He had unintentionally used the word "Club," not knowing that it was an infringement of the applicant's rights. Mr. Justice Buchanan refused the application, as he thought it was a case of perfect *bona fides* on the part of the respondent, and that he had not supplied "Club" soda after he had said he would not do so. The respondent would pay costs up to May 1.

Colonial and Foreign News.

THE JAPANESE PARLIAMENT has accepted a Bill dealing with the control of foreign medicinal specialities.

THE PHILADELPHIA COLLEGE OF PHARMACY has added to its curriculum two new courses—viz., bacteriology and commercial training—both being optional subjects.

WHAT HULL CHEMISTS WANT.—German coasting-vessels having a medicine-chest must get it examined once a year by a medical officer, accompanied by an apotheker.

PRESCRIPTION-PRICES IN ITALY.—Amongst the different Italian pharmaceutical societies there is at present a movement to petition the Government to do away with the many provincial minimum-limit prescription-taxes, and introduce one for the whole kingdom, also having a charge for the several manipulations, on the German system.

EQUAL RIGHTS.—The Russian Pharmaceutical Committee has decided that in future women shall be permitted to enter pharmacy without special restrictions. In 149 pharmacies in St. Petersburg there are 525 assistants employed, of whom 119 are registered. Of these 191 are male and 30 are female assistants, and 133 male and 52 female apprentices.

DRUGGIST AND PHARMACIST.—During the first quarter of 1900, 299 druggists' shops were inspected in Berlin, in 102 of which substances were found that may only be sold in pharmacies. There were 216 different substances specified several occurring twenty to thirty times, and rhubarb eighty five times. Some also sold poisons without the requisite-poison-licence.

AN EXAMPLE TO COPY.—In such pharmacies as keep open all night in Milan and a few other Italian towns, a policeman is stationed, who has to render assistance in case of accidents or when wounded persons are brought into the pharmacy. He also has to make a note of any medicine being given without payment, so as to report it to the Society of Charity.

MUNICIPAL PHARMACY.—The Town Council of the city of Reggio-Emilia is composed of socialists, who have decided to open their own pharmacy, in order to supply at cost all medicine for the local charitable institutions and also to the public. This has given the Italian pharmacists a severe shock, as it is probable that the example will be followed by other socialistic municipalities.

THE RUSSIAN PHARMACEUTICAL ASSISTANTS' aid and pension-fund has now a capital of 379,201*r.* This fund was founded on January 1, 1895, and has proved to be a great blessing. Every pharmacist owning a business contributes a quarter of a kopeck ($\frac{3}{4}$ *d.*) for each prescription, without himself having a claim for aid. This contribution

amounted to 21,543r. 55k. in 1899, and the subscriptions to 46,794r. 45k.

RUSSIAN BOTANY.—Professor Korshinski has been commanded by the Czar to compile a Flora of Russia, which will cover European Russia, Siberia, Turkestan, Caucasus, and Crimea. Korshinski has freedom to choose any botanists he may think fit, and has received 21,400r. from the Czar's private purse to carry on the work.

CONDENSED MILK IN CHILI.—The amount of condensed milk imported into Chili averages about 620,000 lbs. annually, most of which is furnished by Great Britain and Germany. The milk is packed in tins of four dozen in a box. The condensed milk imported from England is known to the trade as "English," while that from Germany is known as "Swiss."

TRADE-RESTRICTIONS IN TURKEY.—In further reference to the analysis of chemicals, &c., at all Turkish Custom-houses, it is reported from Scutari that the new law is causing great inconvenience and expense to importers. For some time there has been a consignment of several cases of cognac and 180 cases of soap waiting at the Custom-house in Scutari, which cannot be delivered to the consignees because the local doctors' committee has declared the goods to be injurious to health.

RUSSIAN LADY-DOCTORS.—Women-physicians have established themselves all over Russia, and have achieved a respected position. Some of them are employed by the Government, and are entitled to a pension. They occupy positions as county physicians, school physicians, physicians for the poor and the municipal ambulance system. Mrs. Dr. N. Schulz, of the St. Petersburg Institute for Experimental Medicine, is one of the foremost experts in bacteriology, and her lectures are well attended by physicians of both sexes. Miss Dr. Lavróskaja, of Obuchow, and a few other female physicians were last year with the expedition which went to Turkestan under the guidance of the Prince of Oldenburg, to investigate the plague.

GERMAN CHANGES.—The Prussian Under-Secretary of State, Dr. von Bartsch, who has been attached to the Ministry of Public Worship and Instruction for more than twenty-five years, has tendered his resignation on account of failing health. In 1890 he was appointed director of the Prussian Medical Department. The successful measures for averting the threatened danger of cholera were at that time his special work. Dr. von Bartsch gained the gratitude of pharmaceutical circles by the creation of the Pharmaceutical Council, which, under his presidency, gave representation of their interests. He was elected Under-Secretary of State in March, 1899, and was succeeded by Dr. Förster in the direction of the Medical Department. At a meeting of this Council on May 30 the question was discussed as to whether it is advisable to follow the example set by the doctors, who have of late years organised Medical Chambers and Medical Chamber Committee by instituting equivalent representative organisations for pharmacists.

CANADIAN PATENT-MEDICINE BILL.—A Bill has been introduced into the Canadian Legislature dealing with the regulation of the "sale of patent or proprietary medicines," of which the following is the preamble:—"Whereas it is necessary and expedient to protect the public against the fraudulent or improper advertisement of drugs, medicines, or cures, and against the sale of such of the same as contain hurtful ingredients, and to license the advertisement or sale of patent or proprietary medicines, and for that purpose to appoint an inspector of the same, and to provide for the payment of a licence-tax in respect of such licences." The advertising of patents is specially dealt with, and sections of the Bill provide that no person shall advertise any medicine, in respect of which a licence has been granted, by any advertisement which consists in whole or in part of any surgical picture or representation; or is of a nature to suggest the means of committing any crime or offensive in its language or suggestion; or is calculated to hold out false hopes of the prevention, alleviation, or cure of any disorder, or, having regard to the formula or prescription filed, is fraudulent or misleading in its statement of the curative properties of the medicine.

American Notes.

(By a New York Correspondent.)

BETTER PAY WANTED.—The apothecaries in the United States Navy have made formal appeal to the organised pharmacists of the country to help them to obtain higher rank and better pay. The appeal has been made especially to the American Pharmaceutical Association, which has been working in this direction through a special committee for several years.

QUININE IN SIXTEENTHS.—The question is often asked why manufacturers list quinine in $\frac{1}{16}$ -oz. bottles. Surely no druggist buys these at double the price he pays for bulk. As a matter of fact, very large quantities of quinine are sold in $\frac{1}{16}$ -oz. packages. The sale is almost entirely to the Southern trade, druggists in Southern States being afflicted with the lethargy common to people in tropical countries.

PRINTING IMITATIONS.—Mr. Brent Good, of the Carter Medicine Company, has obtained a final injunction, with costs, against a Chicago printing-firm for imitating the labels of Carter's little liver-pills. The case had been in the courts for the past two years. This is the first prosecution of printers or engravers who have prepared these spurious labels, and for that reason the decision is important.

FOOD-PRESERVATIVES are used to an enormous extent, and among the most popular to-day is formaldehyde, which is largely used as a preservative for milk. "Freezine" and "Preservatine," two popular preservatives, both consist of formaldehyde. On the label of the former is the statement that "it acts the same as ice, and that as it is a gas it escapes and leaves nothing in the milk, and that it cannot be detected by the chemist." Another popular preservative consists of gelatin, boric acid, and borax. This is for preserving cream. Sodium sulphite is used in chopped meat and "Hamburger steak," and a coloured mixture of nitre, salt, and borax is used for preserving and colouring sausages. A solution of salicylic acid is to be found in most "meat markets."

CATARRH-EXHIBITS.—The peculiarities of our climate are responsible for an immense amount of chronic "catarrh" of the nose, and catarrhal remedies are perhaps more advertised than any other form of patent medicine. Chloride-of-ammonium inhalers are coming into fashion again, and druggists in this city are booming various forms. A popular method of advertising is to seat some good-looking girl in the store-window with one of these inhalers, which she uses apparently with great satisfaction. It would be interesting to learn the effect of the continuous inhalation of ammonium chloride on the air passages. One young girl in a downtown store used the inhaler on an average of four hours a day for two weeks. Probably the most popular form of catarrh-remedy, however, is a snuff containing cocaine, of which enormous quantities are sold. The injury which this remedy did was responsible for the Bill prohibiting the sale of cocaine preparations which was offered to the New York Legislature this year, but, unfortunately, did not pass.

CONSUMERS' DRUG COMPANY.—The National Association of Retail Druggists has met with considerable success in its endeavour to regulate the patent-medicine trade, and just when its efforts seemed likely to be crowned completely with success the German Apothecaries' Society of New York has taken a step which threatens to undo everything. This organisation has conducted a co-operative buying club, under the name of the Consumers' Drug Company, which, under the proposal of the N.A.R.D., would not be able to buy at manufacturing prices. They have therefore applied for incorporation papers, and propose to trade as a regular jobbing house, and ask recognition as such by the N.A.R.D. Their claim that they intend to sell to anybody is manifestly unfounded when the character of the incorporators is considered, and recognition by them would antagonise the wholesale trade, and upset the work of the National Association. The German Apothecaries' Society has attempted to secure recognition of the new company by local organisations, but has not succeeded. Much ill-feeling and racial prejudice have been thus engendered.

Mr. Martindale at the Cape.

As announced by cablegram in "The Chemist and Druggist" of May 19, the President of the Pharmaceutical Society of Great Britain was entertained to dinner by the members of the Cape Pharmaceutical Society. Subjoined is a report of the proceedings by the "C. & D." reporter.

THERE was a large attendance, including many of the leading chemists and druggists of Cape Town and suburbs, at the complimentary dinner given by the Cape Pharmaceutical Society in the Oak Room at Dix's Café, Cape Town, on May 15, to Mr. William Martindale, F.L.S., F.C.S., President of the Pharmaceutical Society of Great



MR. WILLIAM MARTINDALE.

Britain, and author of the "Extra Pharmacopœia." Mr. James Jones presided, and on his right hand the guest of the evening, was seated. Among others sitting at the Chairman's table were Messrs. D. K. Petersen, A. Mathew, Darroll, Jeffreys, Evans, and Dr. Maberley. An excellent dinner having been disposed of, toasting was commenced.

LOYALTY IN SOUTH AFRICA.

The Chairman said he had a toast to propose which he was sure they would all drink with pleasure, it being that of our grand and noble old Queen (applause), and when they considered the manner in which, at her advanced age of 81 years, she had shown her love for her country during the past few months, and the way she had appeared in public and had gone over to Ireland to show her love for her subjects, and how civilians and soldiers had fought for her, then those things, if nothing else, would make them love and venerate her more than any other person in the universe. (Cheers.) He did not need to urge anyone present that evening to rise and drink that toast, because if there were any loyal in that colony it was the chemists, and it was right that they should show their loyalty in the colony, where loyalty was not a mere word, not a mere sentiment, but a thing they could catch hold of, and keep a hold of, too. The loyalty they had shown in this case had also been shown by Australia, Canada, New Zealand, Ceylon, Burmah, and other parts of the Empire, and had been an object-lesson to the whole world. (Cheers.)

The toast was enthusiastically honoured, and the Vice-Chairman proposed the next toast, which was that of "His Excellency the Governor, Sir Alfred Milner." He thought they would all agree with him that a meeting of that kind

did not warrant any expression of political opinion, but they would all agree that, in the troublous times they had gone through, Sir Alfred Milner had been an example to all men by his fortitude and his power of reasoning, while as the representative of the greatest sovereign on earth he had ruled on behalf of her with power and dignity, and commanded the honour and respect of everyone. (Cheers.)

The toast was drunk with musical honours.

The Chairman, in proposing the toast of the evening,

"OUR GUEST,"

said he did not think he need introduce Mr. Martindale to them as he believed they had all heard his name before—(laughter and hear, hear)—in fact, he was afraid they treated it rather familiarly sometimes. (Laughter.) When they got into a mess and did not know exactly what to do they said, "Where's old Martindale?" or sometimes even "Chuck us old Martindale." Of course he need not say that they did not mean Mr. Martindale in the flesh, but the one between little covers, that "Extra Pharmacopœia," that wonderful book he called it—(hear, hear)—which almost superseded all others. He did not think there was a single chemist's store or surgery where the book was not to be found, or a single doctor, chemist, or apprentice who did not know the name of Martindale. When he heard that Mr. Martindale was coming out he thought there was a chance for that gentleman, because this country was full of all kinds of medicinal herbs whose properties were unknown, and only wanted a man like Mr. Martindale with time to take the matter up, because he was afraid they were wanting in research in this country. However, Mr. Martindale would not stay out just now, but he hoped they might see him again. (Applause.) He hoped Mr. Martindale on his return to England would take the greetings of possibly the youngest Pharmaceutical Society in the world to that of the oldest—(hear, hear)—the parent Society. He did not think there were any societies affiliated to the old Society, but still he was sure that when the existence of this young Society became known to the old one they would be assisted in every possible way. The Cape Society was a young one—they were only in their third year—and they had got a lot to learn. For the last two years they had been engaged almost solely in legal matters and deputations to the Premier or somebody or other, or before the Magistrate. (Laughter.) He had been afraid that they would get three months on the Breakwater, but somehow they always managed to get off. However, he hoped that when Mr. Martindale went back he would do his best to help them. Of course, as he had said, this was a very young society, and the next thing they would have to look after was educational matters. He thought it was very hard on the apprentices to have no place to which they could go for tuition. Practically all they had was home and self-teaching, and therefore the large number of failures they got in the examinations was not to be wondered at.

The toast was heartily received, and drunk with musical honours.

Mr. Martindale, who was received with cheers on rising to acknowledge the toast, said he was very pleased at the manner in which they had drunk his health, and also at the Chairman's reference to the little book which his colleague, Dr. Westcott, and he had published, and which had gone through several editions in fourteen years. When he (Mr. Martindale) wanted a rest and change he generally got it by going to sea, and on this occasion he had come to South Africa. In the old country they looked upon this as the land of promise, and although when he had arrived he saw it in a condition which he hardly expected, that was not surprising after what he had heard. For instance, he believed that in the last year or two the herds of cattle in the country had been decimated by rinderpest, and that there was now hardly 20 per cent. of the cattle there used to be. And not only that, but during the last few months they had had a civil war—he spoke advisedly in calling it that—a part of the colony having rebelled against the Mother Country. However, he trusted that would not be for long, and that as soon as Britain put forth her strength, as she was doing now, the war would be brought to a speedy conclusion. (Hear, hear.) Not only was this the case, but one of their great sources of wealth, their El Dorado—he referred to the district round about Johannesburg—had been

stopped, and this impoverished the colony to a great extent. So that these three causes, the rinderpest, the war, and the stoppage of the goldfields, had had a great effect on the prosperity of the country. However, he hoped the war would be brought to a speedy termination, and he knew that for the future they had a great field for enterprise, especially for agricultural enterprise. (Hear, hear.) They had a rich country, and he hoped that in the development of their agricultural resources the people who were suffering from the agricultural depression in the old country would find a field for emigration. (Hear, hear.) They had at present in South Africa a great number of what he might call the best men, picked men from the agricultural districts at home. He spoke of the Imperial Yeomanry—(hear, hear)—whom he had been out to Maitland Camp to see that morning. They wanted the agricultural development of this country increased, and these were the men to do it. His sister had written to him about a young man from the north of England who wanted to volunteer to go out, but he also asked if he could take his plough with him. That was the kind of man to develop the agricultural resources of the country, as its mineral resources had been so largely developed in the last eight or ten years. He trusted that the war would be soon finished, and that a number of these yeomen would be left behind. At any rate, even if not left behind, they would carry back such glowing accounts of the agricultural prospects that would bring out a number of immigrants who would be the making of the country. In the old country they were looking forward to South Africa as being an outlet for a good deal of the surplus population of the country districts in England where wages had got low, and farming interests had got to a low ebb also, because they could import corn and get agricultural produce brought into the country at a less price than they could grow it. He looked forward to what could be done in South Africa in the way of agriculture as being a source of wealth. Continuing, Mr. Martindale said he had spoken of the agricultural position of South Africa, but that night they were met there as brethren, some Scotch, some English, some Welsh, and some Irish too, probably. He was glad to know that they had a Board of Pharmacy which examined the credentials of those wishing to follow the calling of pharmacy, and he was also glad that this had received the Colonial Government's support, and that a system of examinations had been instituted that would, at any rate, prevent ignoramus from commencing the calling. Then they had the Pharmaceutical Society looking after the interests of pharmacists and those following the calling and promoting pharmacy generally in its widest sense. Well, pharmacy was best promoted by the training of a definite apprenticeship and by the education of the apprentices. They must have to start with a fairly good primary education, and afterwards they required an additional secondary education, especially in the two sciences, chemistry and botany. He hoped they might be able to establish courses of instruction, either independently or in connection with the South African College, which would give the youth who had been apprenticed out here a training in chemistry, botany, and physics in such a way that they would be able to pass the examinations creditably. He trusted they would be able to form these classes affiliated in a public way with the South African College or some other college. He was told that when they wanted good assistants out there they had to import them. Well, he thought they ought to train their own young men, train them by establishing courses of instruction so that their youths should have a chance of becoming good practical pharmacists, who would be creditable to them. In Melbourne, Brisbane, Adelaide, and other places they had established such courses of instruction in connection with the colleges in such a way that they can train their own youths to be fairly-accomplished pharmacists. Of course they knew that one could not become a pharmacist worthy of the name without having a fairly good elementary knowledge of chemistry, because to be a dispenser of medicines according to the prescriptions of the medical profession they must know something about the drugs they were using and their sources. He hoped that if he should return to the colony within the next ten years that he would find a school of pharmacy, or classes, or courses of instruction, not only lectures, but with practical work in the way of demonstra-

tions and laboratory class-work under a well-trained chemist. They could not be pharmacists without being fairly grounded in the elements of chemistry and, to some extent, botany as well. Botany was a wide science, and with regard to the flora of the country he had been quite surprised at what he had seen in the neighbourhood of Cape Town, Pietermaritzburg (Natal), Uitenhage, and elsewhere, although he had seen it at an unfortunate time of the year—the winter—when he did not see the land in the beauty of flower. Still he had been struck by what he had found even at this season. In conclusion, Mr. Martindale again thanked the Chairman and others present for the manner in which they had received the toast, which, however, he was afraid was not altogether due to himself, but in a great measure to the parent Society of Great Britain, of which he had the honour to be President. (Applause.)

OTHER TOASTS.

Mr. Barlow proposed the toast of "The Ladies," and in the course of his remarks said that unfortunately they had no lady-pharmacists at the present time in South Africa, but perhaps it was just as well, because they would only be worried to know whether their wares were in accordance with the British Pharmacopœia of 1898. (Laughter.)

Mr. Sainsbury, in a bright, humorous speech, responded to the toast.

Mr. Darroll proposed the toast of "The Press," and Mr. Kayne, of the *Cape Times*, responded.

"The Land we Live in," was next submitted by Mr. French.

Mr. Fick, in responding to the toast, said that the flora of the land could hold its own with any in the world. He also spoke of the number of medicinal herbs growing in South Africa, but which, unfortunately, owing to their lack of men like Mr. Martindale, were not brought to the front. In that connection he was glad to see Dr. Mabberley, who had done so much in tracing a South African medicinal herb—the momsonia. There were many more herbs which would prove valuable for medicinal purposes, but for want of research they were not brought forward. For that reason he hoped that Mr. Martindale would be able to pay another visit to South Africa and that he would be able to make a longer stay. What they wanted here was a little more English energy, and with that and some men like Mr. Martindale the Cape Pharmaceutical Society would be second only to that of Great Britain.

SOUTH AFRICAN PHARMACY AND MOMSONIA.

Mr. Tothill, in the course of a few remarks, said that South Africa was changing, and the future of pharmacy here would be very much changed. He believed that South Africa would offer for the overcrowded market in Great Britain splendid opportunities for pharmacists. They wanted the right kind of pharmacists out there—viz., intellectual and thoroughly educated men.

Dr. Mabberley also extended a welcome to Mr. Martindale, and said that the latter represented very largely the link between the medical profession and the pharmaceutical profession, and he had represented that very worthily from both sides as one of the old teachers of the University College. Continuing, Dr. Mabberley said there was a certain amount of friction between the medical and the pharmaceutical professions, but he thought they should try and see whether they could not work more or less in harmony. The Secretary had mentioned his name with regard to researches. There were some very valuable drugs in the country, and he (Dr. Mabberley) had identified himself particularly with the drug momsonia, with regard to the use of which for chronic and acute cases of dysentery he had published a paper. After that there was a certain demand for the drug, and the great difficulty had been for chemists to supply it. However, when he published that paper, he did not know that the two varieties of momsonia—viz., *Momsonia ovata* and *Momsonia Burkei biflora*—were very different indeed as regarded their action. The former was a low-veldt variety, while the latter was found on the high veldt, and there was some difficulty in getting it. Proceeding, Dr. Mabberley pointed out that the variety he had worked with, and with which his successful record of cases had been obtained, was the high-veldt variety, but he was afraid that, owing to it being easier gathered, and especially as it was a much finer-looking specimen, the low-veldt variety was being used for mom-

sonia tincture in many cases. In conclusion, Dr. Maberley gave some instances illustrating the necessity for research with regard to medicinal herbs in South Africa. He especially mentioned a herb which had been given him, and which he found of immense value in cases of the low bilious fever contracted in malarial countries, but the most peculiar thing about the drug was that he had never been able to trace it. That showed the importance of carrying out a systematic course of investigation.

The proceedings closed with a vote of thanks to the Chairman, proposed by Mr. Evans, and suitably responded to.

During the evening an excellent programme of music and recitations was rendered.

At 10 New Cavendish Street, W.

Mr. Martindale came into his pharmacy with a very brisk step, and looked so well after his trip to South Africa that it seemed unnecessary to ask about his health. One of our staff had called one morning this week with that intent, and soon he was listening in the little den behind the dispensary to the latest impressions of South Africa. Mr. Martindale was well received by all the craft there; the foregoing report shows what the chemists of Cape Town did in the absence of Mr. Mathew, the President of the Cape Society. The heartiness in Natal was equal to it, Mr. G. A. Champion, of Durban, the President of the Pharmacy Board and of the Pharmaceutical Society of the Colony, and the Secretary of the Society having met him when he landed, and introduced him to the delights of the Garden Colony. Mr. Martindale went as far north as Pietermaritzburg, also visited Port Elizabeth, and saw a good deal of South African medicine and pharmacy. His impression is altogether favourable, and he believes there is a great future for the country, especially in the development of agriculture, the land being rich and productive, and long ere now should have secured greater attention, had not the tillers of the soil been allured to the mines through the hope of quicker fortune.

As to pharmacy South Africa is specially favoured in a complete absence of dispensing doctors. Except in up-country districts doctors never dispense their own physic, and the relations between physicians and pharmacists are excellent, while in the Cape the recent friction arising from alleged counter-practice has been removed by last year's amending Act. The trade of up-country chemists has been seriously interfered with by the war, and as the military authorities have taken the railway lines under their control, it has been difficult to get supplies forward. This condition will remain for some time, Mr. Martindale thinks, and it will be at least a year from now before the country returns to its normal condition of trade. The towns on the coast have meanwhile been reaping a rich harvest, and the pharmacists have got their share of the golden grain. Mr. Martindale had been particularly struck by the business energies of our South African *confrères*. "The shops," said he, "are usually well appointed" (he showed our representative a few photos of them, one or two of which have already been reproduced in the *C. & D.*). "The proprietors know the wants of their customers well, they have plenty dispensing—in fact, it is good commercial pharmacy. As to the qualification required by the Boards of Pharmacy, well, you know, it is the same as in all young colonies: they want to know if a man is safe, and that is all that can be expected."

And so the conversation proceeded on matters which are not of public interest until our representative, reminding Mr. Martindale that he was still President of the Pharmaceutical Society of Great Britain, asked him what he thought of the turn that pharmaceutical events had taken during his absence.

"What else did we expect?" came the reply. "On this company question we must sooner or later, I have always thought, go to the Government, and the election seems to point that way."

"Is it a settled thing that you are to give up the presidency?"—"I am afraid so."

"Solely on the ground of health?"—"Yes."

The rest of the conversation was about the probable next President, and as to that the speculation has not proceeded further than as stated in the *C. & D.* on May 19—viz., that Mr. Newsholme, of Sheffield, is spoken of, and patience must abide until next week for something more definite.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

(From the "Trade Marks Journal," May 23, 1900.)

"CATALINE"; for veterinary medicines. By G. C. H. Clement, Claremont, Grove Road, South Woodford. 229,818.

"ANTIMARINE" (no claim for "Anti"); for patent medicine. By F. Tupholme, 1 Coleherne Terrace, London, S.W. 222,094.

Device of Liberty statue; for patent medicines and medicated articles. By R. J. La Grange, 72 Sefton Terrace, Liverpool, 228,554.

"COCOLA" (no claim for "Coco"); for goods in Class 3, not including hairwashes. By C. Thomas & Brothers (Limited), Broad Plain Soap-works, Bristol. 229,442.

"ANTHROPASTYL"; for articles in Class 3. By W. A. Jones, Grange Road, W. Kirby, Cheshire. 229,672.

"PEDESTRIE" (no claim for "PEDES"); for antiseptic foot-powder. By the London Manufacturing Company, 27 Eldon Street, E.C. 229,742.

Device of hands holding bandage, and signature; for surgical bandages. By Vincent Wood, 4 Albion Place, Blackfriars, S.E. 228,376.

"HOSEZENE"; for sanitary towels. By the Hosezene Company, 13 Market Place, Carrington, Notts. 229,832.

"LYVO"; for aerated beverage. By Wood & Watson, 132 Gilesgate, Durham. 228,683.

"BEAMA"; for beverages. R. Reavley, Salem Street, Jarrow-on-Tyne. 229,876.

"FARCALIA"; for perfumery and toilet articles. By J. C. Legares, the Calpe Pharmacy, Waterport Street, Gibraltar. 230,170.

(From the "Trade Marks Journal," May 30, 1900.)

"MORTRA" (no claim for "Mort"); for chemical substances. By H. B. Billington, 103 Sheffield Road, Barnsley. 230,042.

"LOSALL'S" and device of crown; for chemical substances. By Lofthouse & Saltmer, 12 Market Place, Hull. 230,059.

"SPARKLETARIS" (no claim for "Sparklet"); for beverages. By Aerators (Limited), 56 Broad Street Avenue, E.C. 228,890.

"LUPA"; for infants' food or adjuncts. By H. J. Blackler, 27 Hatchlands Road, Redhill. 229,986.

Device of two wings; for mineral and aerated waters. By W. & T. Bagge, King's Lynn. 225,923.

"BORAXALINE" (no claim for "Borax"); for perfumery and toilet articles. By the Patent Borax Company (Limited), 194 Ledsam Street, Ladywood, Birmingham. 224,362.

"YERBAZ" (no claim for "Yerba"); for hair restorer. By T. Elliott, Chelmsford Road, Woodford, Essex. 229,856.

Device of crossed knife and fork; for perfumery and toilet articles. By J. Crosfield & Sons (Limited), Bank Quay, Warrington. 230,179.

"RED CAP" and "WHITE CAP"; for perfumery and toilet articles. By Vinolia Company (Limited), Malden Crescent, London, N.W. 230,567, 230,595.

CAPE COLONY.

(Application made at Cape Town)

Device of the deer leap and signature; for chemical substances in Class 3. By S. Kutnow & Co. (Limited), 41 Farringdon Road, E.C.

CHEMICAL-TRADE IN POLAND.—According to the British Consul at Warsaw, last year was by no means favourable for the chemical-industry in Poland. The demand was very slack on account of over-production, so that prices went down considerably. Yet four more chemical-works are being started in Poland. Hydrochloric and nitric acids were quoted considerably lower than in 1898, but the price of sulphuric acid was maintained.

War Notes.

TRANSVAAL AND O.R.C. SUBSCRIBERS.—Any subscribers of *THE CHEMIST AND DRUGGIST* whose places of business were in the Transvaal and Orange River Colony, and who have not received their copies since the war broke out, are requested to send their names and addresses to the Publisher, 42 Cannon Street, London, E.C. We have reserved their copies of *THE CHEMIST AND DRUGGIST* and copies of the *DIARY*, and these we shall send to them as soon as they inform us of their addresses.



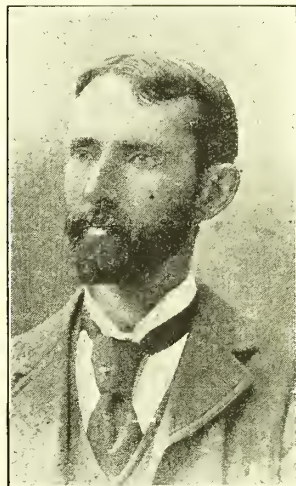
MR. N. O. RUFFEL.

KIMBERLEY CHEMISTS

WHO WEATHERED THE SIEGE.

There were also in the town
Messrs. Aldridge, Gasson, Helmore,
McBeath, M. Thane, and Wheeler.

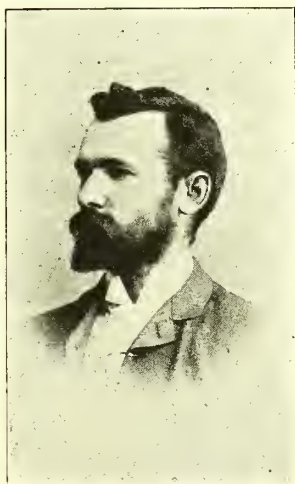
We printed Mr. Gasson's portrait
last week.



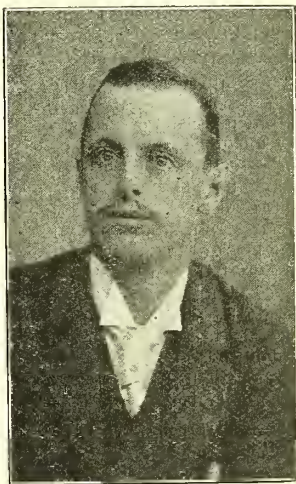
MR. W. TUDOR.



MR. A. T. BUTLER.



MR. C. H. TURPIN.



MR. W. N. COOPER.

A COMPOUNDER-CORRESPONDENT this week sends us an interesting account of the work done at the 6th General Hospital, Naauppoort:—

We started from De Aar in the evening, and woke up the following morning in Naauppoort. No war rumour this time. We had arrived in the "wee sma'" hours, and about 8 o'clock we moved up the line opposite the hospital site.

The 5th Stationary Hospital was here before us, though, and a Civil compounder with it.

Sleeping-accommodation was rather cramped for the first day or two, but we two compounders, together with the one who was already here, managed to snatch some rest in the dispensary.

The dispensary was a bell tent, with a counter supported by two packing-cases, and half-a-dozen panniers, surgical and medical, arranged around the tent. But all this was luxurious compared

with one night we had. We had not been here a week before we had rain. I had heard previously of South African rains, but never thought I should experience them; in fact, I probably thought they were slightly exaggerated.

It had been raining—at least, pouring—for an hour or so, when everyone had to turn out to give a hand with the marquees, as they were coming down with patients inside them. We returned to find our own sleeping-tent level with the ground. Recourse had to be had to the "dispensary" again, and, as our kit-bags were in the sleeping-tent, we had to sleep in wet clothes. I chose the counter as being the driest part.

Our camp was a picture of desolation in the morning.

We arrived at Naauppoort on February 21, and on the 25th we received over 200 sick and wounded from Paardeberg. They had had a very rough time of it, poor fellows. They were transported from Paardeberg to Modder River by convoy, and the rest of the

journey was by train, and altogether they had been travelling five days.

On March 1 we received another trainload of sick and wounded from Paardeberg, being again over 200 in number. Eighty of these were serious cases, necessitating stretchers to carry them to hospital.

Since then the hospital has been increasing in size, both as regards the number of patients and staff. The hospital is divided into three divisions—viz., surgical, medical, and enteric. We have about 800 patients in hospital at the present time, and I am sorry to say about 300 of these are enteric cases. Fortunately the cases we have at present do not appear to be of so virulent a type as those we had when first we came. Modder River, with its water tainted by the dead bodies of our enemies, is said to be accountable for the worst cases. The surgical part of the hospital is supplemented by an operating-theatre and Röntgen-ray apparatus, both of which are in corrugated-iron buildings.

The patients are all placed in marquees, each of which holds seven patients comfortably. The hospital is situated on either side of the railway which runs up to Bloemfontein, and is in an excellent position. We have received sick and wounded from Bloemfontein, Orange River, and Stormberg, these being originally three out of the four lines of advance.

A great many of the hospital staff have suffered from sickness at some time or another, and I am sorry to say that Compounder Currie, who was with the 5th Stationary Hospital when we first arrived, was the first to be admitted into hospital, and afterwards died of enteric. He was buried in Naauwpoort, and the two of us left both managed to pay our last respects and attend his funeral. The other compounder also contracted enteric, but was invalided home, and embarked at Cape Town on May 1.

For a hospital in the field the dispensing is very advanced, and as there are about twenty Civil surgeons here they stick to their old traditions and imagine they are in an English hospital where anything and everything can be obtained. A prescription for beta-naphthol, gr. x. in wafer-paper cachets seems a luxury at home, and one can imagine the surprise of the compounders on receiving such a prescription.

It seems a lot of time wasted to write "calomelanos" when one's on active service. It would be difficult to give the number of prescriptions dispensed in a day, but it is considerable, and so many powders, such as pulv. ipec., pulv. ipec. co., &c., are used that the first few hours every morning are employed putting up powders and making stock-mixtures.

I am pleased to be attached to what is without doubt the largest general hospital on the field in South Africa, and probably the largest ever on active service.

I trust now I may also be fortunate enough to have a share of field-hospital work also, for which I have made an application.

E.

PRIVATE W. H. SHARPLES, of the R.A.M.C., writing home from Bloemfontein to relatives at Blackburn, states that Beecham's pills were at the date of writing (April 26) being sold for 6s. per box in Bloemfontein.

DIED AT NETLEY.—On May 28 at Netley Hospital, First-class Orderly Alfred Andrews died of diabetes, having been invalided home from South Africa. Mr. Andrews (was apprenticed with Mr. Cardell, chemist, Bodmin, but joined the R.A.M.C. about three years ago. He returned from South Africa on the hospital-ship *Maine*, and the Queen expressed sympathy with him on her recent visit to Netley.

WAR WINDOW-DISPLAY.—Mr. King, chemist and druggist, Amersham, has a number of interesting relics of the Natal campaign in his shop-window. Included are a 14-lb. Boer shell with case, which was found unexploded in a heap of sand at Ladysmith, two "pom-pom" cases, Mauser bullets, and a fragment of lyddite shell.



Reviews.

A Pocket-book for Chemists, Chemical-manufacturers, Metallurgists, Dyers, Distillers, Brewers, Sugar-refiners, Photographers, Students, &c., &c. By THOMAS BAYLEY, Assoc. R.C.Sc.I. London: E. & F. N. Spon. 5s.

The fact that this compact and useful pocket-book—replete as it is with all sorts of things the worker in pure or applied chemistry would like to know—has reached its seventh edition is in itself a recommendation which we need scarcely emphasise. We learn from the preface that this edition has been rearranged and to a large extent rewritten, and we may say that, on the whole, the work has been well done. We venture to express regret, however, that in the 32 pages in which atomic weights and allied matters are dealt with, space has not been found to introduce the atomic weights adopted by the Commission of the German Chemical Society, seeing that they represent a distinct step towards uniformity, and that they are in actual use in this country. In a work of this kind, which includes a vast number of figures, &c., it is, perhaps, hopeless to expect freedom from misprints, but we have observed some inconsistencies which might have been avoided by more careful editing. Thus,

while the most recent metric equivalents of imperial weights and measures have been introduced, they have not been uniformly adopted; and hence we find 1 cubic foot = .02831677 cubic metre on page 100, and = 28315.3 c.c. on page 104; and there are other analogous discrepancies. Twaddell (page 167) appears as "Twaddle" on page 14. On page 104, 1 oz. troy is incorrectly given as = 31.80 grammes, the correct number (31.10348) being given on page 98. "Blax Flux" (page 370) is not so likely to prove misleading. The general get-up of the book leaves nothing to be desired.

Chemisches Hilfsbuch. By DR. JOVAN P. PANAOOTVIE, Berlin: Ferd. Dümmler's Verlagsbuchhandlung, 1900. 2m.

THE most important part of this little book, for general use, consists of tables of multiples of the atomic weights and of analytical factors. The whole of these are based upon the atomic weights adopted in 1898 by the German Commission, and the book will be well-nigh indispensable to the many chemists who now employ these standard values. We would suggest that its usefulness might be greatly enhanced by the inclusion, in future editions, of columns (for which there is ample space) containing the logarithms of all the multiples and factors, and by the addition of a compact table of five-figure logarithms of the numbers from 100 to 1,000. The latter part of the book contains tables for the use of chemists engaged in determinations of the various kinds of sugars and a handy table of volumetric constants. We notice a few slips which require correction. Thus, the formulæ for rubidium, silver, and thallous oxides are given as RbO, AgO, and TlO respectively (pages 40, 42, 44), and the factors based upon these formulæ are wrong; while the factor for calculating boron from boric acid (page 17) is double what it ought to be.

First Lessons in Bookkeeping. By J. THORNTON. 14th edition 7½ × 4½. Pp. 224. 2s. 6d. London: Macmillan & Co. (Limited).

A CORRESPONDENT, writing in appreciation of our series of articles on the commercial education of the pharmacist (*C. & D.*, September 30, 1899, page 564), recommended Mr. Thornton's book as a most suitable one to teach the theory of bookkeeping. A perusal of the latest edition of this work, which we have received from the publishers, enables us to fully endorse all the good things which our correspondent said about it. The whole system is taught in a series of "lessons," with questions and exercises at the end of each lesson, and the simple language used is further aided by appropriate diagrams interspersed throughout the book. Two of these diagrams are particularly noteworthy. The first illustrates bookkeeping generally, and shows how to "prove" the books, while the latter gives a synoptical view of the various accounts contained in the ledger. The penultimate page is devoted to appropriate mnemonic rhymes, and the whole is a most simple, useful, and exhaustive treatise on a subject which is a necessity to a successful business man, but which is oftentimes sadly neglected by the ordinary pharmacist.

New Books.

Edwards, F. G. *Chemistry an Exact Mechanical Philosophy* 8vo. 3s. 6d. (Churchill.)

Fothergill, W. E. *Manual of Midwifery: for Students and Practitioners.* 2nd ed. Cr. 8vo. 7½ × 5½. Pp. 524. 9s. net. (Clay.)

Schmidt, L. M. *Principles and Practice of Artificial Ice-making and Refrigeration.* Illus. 8vo. Pp. 248. 14s. net. (Low.)

Trotman, S. R. *Elem. Inorganic Chemistry: Metals.* 7 × 4½. Pp. 182. 2s. (Rivingtons.)

Tschirch, A. *Die Harze und die Harzbehälter, Historisch-Kritische und experimentelle in Gemeinschaft mit Zahlreichen mit-arbeitern Ausgeführte untersuchungen.* 10 × 7. viii. + 417 pp. 18m. (Gebrüder Borntraeger, Berlin.)

Van Rijn, Dr. J. J. L. *Die Glykoside, chemische monographie der Pflanzenglykoside nebst systematischer darstellung der Künstlichen Glykoside.* 8½ × 5½. xvi. + 561 pp. 10m. (Gebrüder Borntraeger, Berlin.)

Pharmaceutical Tinctures.

Specific Gravities Suggested for the next B.P.

By J. C. McWALTER, Pharmaceutical Chemist.

IN the next Pharmacopœia we shall be favoured, it would appear, with the limits between which the sp. gr. of a tincture may vary, and also with the percentage of residue left after evaporating. At least, that is what I gather from the following circular sent out by the Pharmaceutical Society of Ireland:—

67 Lower Mount Street, Dublin,
January, 1900.

DEAR SIR,—Will you be good enough to favour me, for the Pharmacopœial Committee of the Society, with an account of the quantities of tinctures made by you according to the B.P. up to the end of March, together with the specific gravity of the product in each case and the weight of residue after evaporation of an ounce of the tincture?

Yours faithfully,

ARTHUR T. FERRALL, Registrar.

Now, the published tables of the sp. gr. of tinctures made according to the last B.P. are not very numerous. I know that one was published in THE CHEMISTS' AND DRUGGISTS' DIARY, and I trust that it is accurate, for I cut it out and presented it to a public analyst in Dublin who was reporting on the matter for the Local Government Board. Then we have the last edition of Mr. Wippell Gadd's Pharmacopœia, where the sp. grs. are given in most cases, although the *Lancet* unkindly says that they should be carefully verified. Of course, there are also the classical tables of Messrs. Farr and Wright and Mr. Fletcher, but most of their work was done before the issue of the present B.P., and although this gives sp. grs. for various strengths of alcohol, still the details vary. I own to a prejudice against Mr. Fletcher's figures, which is possibly both unfounded and unfair. My impression is that he is such an advocate for hydrometric work that his results have been obtained by this method. On the contrary, I have obtained such appalling differences between gravimetric and hydrometric indications of sp. gr. that I have quite lost confidence in the latter. The following sp. grs. were obtained as a result of some little investigation in response to the circular above, and are all procured by gravimetric methods with a 1,000-gr. sp. gr. bottle. They may possibly serve some useful purpose as an indication of the ordinary sp. grs. of the tinctures as found on the shelves of the ordinary pharmacy:—

	McWalter's Figures	Umney's Figures*
Aloes	0.953	0.975
Anisee	0.885	0.893
Aurantii	0.878	0.876
Belladonnæ	0.910	0.916
Benzoin. comp.	0.894	0.893
Calumbæ	0.920	0.918
Camph. co.	0.927	0.915
Card. co.	0.949	0.945
Cinchonæ	0.913	0.916
Cinchonæ co.	0.916	0.912
Cinnamomi	0.939	0.899
Colchici	0.958	0.950
Croci	0.940	0.925
Cubebæ	0.861	0.846
Ergotæ	0.966	0.935
Gent. co.	0.964	0.965
Hydrast. canad.	0.925	0.923
Iodi	0.885	0.878
Jalapin.	0.921	0.910
Kino	1.022	0.998
Krameriæ	0.936	0.932
Lavand. co.	0.844	0.836
Limonis	0.881	0.876
Lobeliæ æther.	0.846	0.816
Lupuli	0.961	0.931
Myrrhæ	0.850	0.848
Quassie	0.927	0.942
Scillæ	0.965	0.970
Sennæ	0.984	0.993
Tolutan.	0.878	0.866
Valerianæ ammon.	0.937	0.939

I have to thank my assistants, Miss Lillie Smyth and Mr. P. J. Cosgrave, for their assistance in taking these sp. grs.

* C. & D., April 30, 1898, page 711.

Veterinary Notes.

By M.R.C.V.S.

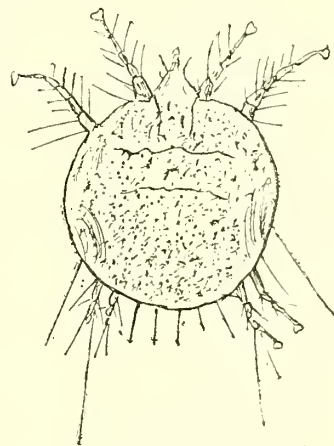
SKIN-DISEASES OF ANIMALS.

WHETHER practising in town or country, whether court- ing veterinary work or not, the pharmacist is from time to time consulted as to the skin-troubles of animals. Speaking broadly, it may be said that the diseases of the integument are comparatively simple and nearly always amenable to treatment.

In a few instances, and in rare examples among canine patients, chronic and intractable disorders have to be combated, but as compared with those of the human subject they are easily dealt with. In the treatment of skin-troubles in animals, the veterinarian has advantages denied him so often in connection with other maladies, where the patient cannot be induced to co-operate, or be compelled to submit to rules. He (the patient) can be covered with an oily, or evil-smelling lotion, compelled to take baths, his natural coat clipped off, chained up, or otherwise controlled.

A large proportion of the skin-diseases of animals are of parasitic origin, and owners are apt to assume that mange is the cause—indeed, among the general public, it is a generic term for any cuticular derangement. True mange, as understood by the profession, is due to one of several varieties of parasites, the chief divisions being sarcoptic and dermatodectic. Some wander among the hairs, which to them are equivalent to a forest of tall trees, while others burrow into the true skin, below the outer or upper layer of comparatively insensitive cuticular layers, which are always more or less in a state of desquamation or peeling. With some of the mange-mites the female only "goes to ground" or makes a burrow or tunnel under the cuticular layer, and that for the purpose of depositing her eggs. True, a double purpose is effected by this operation: safety for the ova, and an immediate provision for their wants when hatched out and requiring food. The irritation caused by the excavating-process, followed by the presence of a foreign body under the skin, sets up inflammatory action in the host, of such a kind as to induce a flow of serum: the food of the tribe. The males, like those of the bot-fly and many other more highly-organised creatures, do not take part in the puncturing of animals' skins, but merely disport themselves in the neighbourhood to a select and admiring audience of females, the latter being in a great majority and seeking the males until impregnation has taken place.

Though each species of domesticated animal has its own particular mange-mites, and they are not strictly transferable, they all belong to the same class, and their destruction must be the object aimed at, if the disease they produce is to be cured. The skins of our domesticated animals are not all alike in their susceptibility to outward applications of drugs, else a universal panacea could be found for mange, since it is known to be caused by a similar insect. The scab-insect of sheep—which is, of course, mange—differs little from the mange-mite of horses, cattle, dogs, or cats, but a remedy entirely suitable to the first named would prove



THE SHEEP-SCAB (*Acarus*).

fatal to the last; we have therefore to seek for effectual, but safe, applications suited to the different domesticated animals, or those living in captivity, for we are not infrequently called upon to prescribe for monkeys, squirrels, and birds.

We are indebted to the mediæval friars, as most of our

pharmaceutical brethren are aware, for the discovery or application of sulphur to human patients suffering from mange between the fingers (itch), and in this drug we possess a specific, when the remedy can be brought into actual contact with the enemy. This, however, is the great difficulty in the case of animals with long coats and a mass of scurf of a very greasy character, which are admirably adapted to keep animals warm and waterproof, but afford an asylum to parasites of the kind we are considering, and particularly those having the burrowing propensity. If we would apply sulphur to a mange case, say in a Sheltie or other pony with a long ragged coat, we must mix it with a large volume of oil, in order to penetrate the matted hair. Any cheap nut oil will answer the purpose, and the proportion of 1 lb. of sulphur to each gallon will be found convenient for use with a hard stable dandy or water brush. Two or three soakings will be necessary, and the instructions accompanying the lotion should be to the effect that the mane and tail, the face, and poll, should receive first and particular attention, as they require more penetration, and the surplus will be utilised on the parts below. This is a point which needs to be impressed on all who undertake the application of any sort of lotions to animals, both for the reason given above and as cutting off the retreat of larger parasites which may find refuge in the dense tangles of hair about the poll, &c., and presently restock the body, from their breeding-haunt. Around the eyes, and inside the ears of dogs and cats, lice, fleas, and other insects find shelter until the bath is over, unless the operator begins with the face and head and works backwards with his medicaments, or his soap and water.

Another cheap remedy where large quantities are required is 1 part of paraffin to 7 parts of any fixed vegetable or animal oil. This is a popular application, and one for which the purchaser does not usually apply to the pharmacist. It has the objection that some horses are blistered by it, and the same may be said of cattle, though not so sensitive as solipeds. Many farmers apply paraffin neat, to stock, when about the neck and shoulders, lice are found in the spring. It kills the lice, but it generally leaves the skin bald for some little time, and we cannot recommend agents which injure the patient, if more suitable ones can be found.

One of the most valuable, but for some unexplained reason neglected, remedies for mange and other parasitic skin-diseases is that unstable preparation potassa sulphurata. Perhaps I have given the reason already of its unpopularity with chemists—their habits of accuracy and sense of order is offended by a compound varying with the number of weeks it has been in stock. This is not sufficient ground, I venture to think as an experienced practitioner, for rejecting the very best of parasiticides. A well-known wholesale firm, catering for veterinary surgeons, is so alive to the value of this agent as to put it up as a clear-yellow fluid with a fancy name, and vend it at 10s. per lb. to practitioners. This, it will be seen, yields a very envious profit. It does not rapidly change, only a small amount of precipitate falling in three months. In the proportion of 1 oz. of pot. sulphurata to 40 oz. of water an efficient lotion is produced, which can be used alike with safety upon the most delicate pink-skinned dog or cat, monkey, or cavy, or supplied in gallons, with equal advantage for application to horses and cattle. No doubt a solution of a sulphide prepared in any other way (e.g., solution of calcium sulphide so largely employed for skin-diseases) would prove fatal to the species of mites. There is no doubt, too, that the administration of sulphur internally helps to destroy sarcoptic plagues, and it may be presumed to do so by the exhalation of sulphuretted hydrogen through the skin, for it has not been shown that the blackening of one's silver watch, when taking sulphur, is due to the elimination of the substance itself.

RESTRICTIONS ON SUGAR-PREPARATIONS.—A new Spanish law has fixed a duty of 4pes. per kilo. on medicines containing sugar, glucose, saccharin, or similar compounds. Article 14 of the same law prohibits the importation, manufacture, circulation, or sale in the kingdom of food-substances containing saccharin or similar compounds or mixtures of glucose and sugar. Such articles are to be seized and destroyed after the authorities have been notified. Sugar-factories and sugar-bakeries are prohibited to make or stock glucose, &c.

Scientific Progress.

A New Essential Oil.—According to Alpers, the essential oil of *Aralia nudicaulis* consists almost entirely of a sesquiterpene and a sesquiterpene alcohol, $C_{15}H_{25}OH$. The sesquiterpene $C_{15}H_{24}$ has a sp. gr. 0.9086 at 20°, and boils at 20°. Its optical activity is $[\alpha]_D = -7^\circ$, and its refractive index 1.49936. It could not be identified with any known sesquiterpene, and the author proposes to call it araliene.—*Apotheker Zeitung*, 1900, 319.

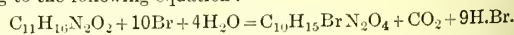
A New Oxydase.—The functions of oxidising ferments in the vegetable kingdom have come into great prominence lately, chiefly due to the efforts of Bourquelot. Sarthou has just succeeded in characterising and isolating one of these bodies (*Journal de Pharmacie et de Chimie*, 1900, 482 et seq.) from the latex of *Schinus molle*. An experimental demonstration has shown that this body, which the discoverer terms schinoxydase, acts as a fixer of atmospheric oxygen. It has been isolated by precipitating the milky emulsion (latex) with alcohol, and washing the flocculent precipitate with the same solvent until all soluble matter is removed. The precipitate is then dissolved in water and reprecipitated with alcohol. Sarthou concludes also that the ferment is present not only in the latex, but also in the leaves and stem of the plant.

Essential-oil Notes.—Haensel, in the current issue of his *Berichte*, gives the following interesting comparison between the oil distilled from purified balsam of tolu and that from the crude balsam (*Pharm. Germ.*, III.) :—

		Sp. Gr.	Rotation	Ref. Index
Purified	...	1.0119	- 3.6°	1.5294
Crude	...	0.8305	0°	1.5101

Schimmel & Co. (*Berichte*) have found methyl alcohol, furfural and diacetyl in the distillation-water of oil of veti-vert. It will be remembered that similar products were previously found in the water from oils of cloves and caraway. An interesting report on a new essential oil appears in the same publication. This is obtained from the "Watará" seeds from Bombay—seeds which so much resemble those of *Xanthoxylum piperitum* as to make it probable that they are the product of one of the *Rutaceae*, probably of *X. alatum* or *X. acanthopodium* described by Dymock. Two per cent. of oil was obtained of coriander-like odour; sp. gr., 0.8714; rotation, 6° 31'; and saponification value, 2.71. The following constituents have been identified:—Limonene and dextro-linalol. In discussing santalwood oil, it is suggested that "santalol" has the formula $C_{15}H_{22}O$, and is not a sesquiterpene alcohol.

The Chemistry of Pilocarpine.—A paper on the chemistry of this alkaloid by Pinner and Kohlhammer is published in the current issue of the *Berichte* (xxxiii. 1428), with the view of announcing the results obtained by these chemists, as Jowett is now publishing his researches on the same body. The useful summary of the hitherto recorded work which appeared in the paper by Jowett as communicated to the Chemical Society is acknowledged and to a certain extent reproduced. The authors proceed to describe products obtained by them. Dibromopilocarpine perbromide ($C_{11}H_{14}Br_2O_2N_2 \cdot 3HBr$) was prepared by dissolving the free base in five volumes of acetic acid and adding three times its weight of bromine dissolved in the same solvent, in small quantities at a time, with constant shaking. The resulting perbromide separates and forms yellowish-red needles, easily soluble in warm acetic acid or in cold alcohol, benzene, or acetone, but only slightly so in ether and chloroform, and it is insoluble in cold water. By the action of ammonia the free base, dibromopilocarpine ($C_{11}H_{14}Br_2O_2N_2$) separates. This forms long, thick, colourless prisms, melting at 79°, and it is soluble in alcohol, acetone, chloroform, and benzene. By the action of bromine in sealed tubes at 100°, an entirely different body results. Colourless prisms of an acid, bromocarpinic acid ($C_{11}H_{15}BrN_2O_2$) are formed. Bromocarpinic acid is only slightly soluble in cold or hot water; more easily in most organic solvents. It melts at 194°. It is a powerful acid, decomposing carbonates. The barium salt ($C_{10}H_{13}BrN_2O_2Ba \cdot 5H_2O$) is a micro-crystalline powder, insoluble in alcohol. The formation of this acid takes place according to the following equation :—



This reaction probably takes place in two stages, an oxycarpinic acid resulting first by simple oxidation, and the hydroxyl group present is then oxidised directly by the bromine. Further researches on the constitution of these oxidation-products are in progress, and will be published in due course.

Notes on Otto of Rose.

By HENRY GARNETT, F.C.S.

THE subject of the chemical and physical examination of otto of rose is one of immense importance. The great value of the product and the extent to which, unhappily, sophistication exists naturally make it so, while the fact that the adulteration is so skilful as practically to elude all ordinary tests makes the analysis of otto of special interest to chemists. It is well known that the chief, if not the only, adulterant is the oil of palma rosa, or "Turkish geranium," an oil derived from a widely different plant, but one which closely approximates in chemical composition to the liquid portion of the otto itself. Its somewhat rank smell renders its presence evident if the percentage is large, but there is no doubt that as much as 5 per cent. will escape detection even by the nose of the "expert." In this connection I may mention that experience teaches me that if the suspected otto is dissolved in a little spirit and the solution diffused in a large quantity of warm water, and the mixture compared side by side with a similar mixture of pure otto, under exactly similar conditions as regards quantity and temperature, the difference in the odour is more readily detected than when the otto is smelled alone or diffused through some solid.

SPECIFIC GRAVITY.

This I am in the habit of taking in a Sprengel tube at a temperature of 30° C. (water at 15.5° = unity), this being the temperature generally employed in Bulgaria. In my opinion the limits usually given for a pure otto are too wide and admit sophistication. I have found the sp. gr. of the finest ottos to fall within 0.8525 and 0.8575—indeed, I look on the latter figure with some suspicion, while those with higher densities (0.860 and higher are sometimes met with) almost always give other evidence of sophistication. I consider the B.P. figures 0.856 to 0.860 to be too high. My figures are based on Bulgarian ottos over a number of years, including all the best brands. Parry's statement* that . . . "0.855 to 0.865 may be taken as including most good commercial otto" must be received with some caution, as it would exclude some of the finest otto and admit much that was doubtful. As imported into this country by the largest houses, the otto is always "bulk'd" from the products of the various small distillers. M. Raitsow (*Apothek. Zeitung*) has published figures showing a range of 0.8531 to 0.8659 at 75° F. from samples said to be authentic; these figures are naturally rather higher than those based on a temperature of 30° C.

OPTICAL ROTATION.

This varies considerably, but usually lies between 2° 15' and 3° 15' for samples in other ways satisfactory (temperature of observation 27° to 30° C.). Parry gives the limits +1° to -4°, but for Bulgarian otto these can scarcely be considered "safe." I have never met with one having a retro-rotation.

FREEZING-POINT.

It is almost impossible to obtain figures agreeing closely with those given by Bulgarian merchants, as, although this is almost their only standard for the valuation of otto, their method of taking the "setting point" leads to uncertain and varying results. One of the most scientific of these gentlemen has described to me the method which consists in standing a vial (1 or 2 oz.) of otto in a bath slightly above its melting-point; a thermometer is placed in the bath, either bath nor otto is stirred, and the whole is allowed gradually to cool. The point at which crystallisation is seen to commence on the sides and bottom of the bottle is taken, the temperature of the bath being then read. The mode which I find yields the most concordant results consists in allowing the melted otto to cool gradually in a jacketed tube (similar to a Beckmann freezing-point apparatus), using a thermometer graduated to 0.2° or 0.1°, and stirring constantly with a platinum-wire stirrer. The water-bath should not be more than 3° to 4° C. lower than the freezing-point of the otto. The small air-bubbles carried

down by the stirrer will rise while the otto is fluid, but as soon as the least permanent crystallisation has set in the bubbles remain suspended, and can be seen even before the transparent crystals are visible. With care the freezing-point taken in this way should not vary more than 0.1° in different determinations. Here again the limits usually given are wider than those found by me for ottos believed to be genuine; the B.P. range of 19.4° to 22.2° is certainly wide enough, while Parry's "17° to 23°" allows too much scope for adulteration. In my opinion 19.5° to 22° would cover all the purest ottos of Bulgarian origin. Some recent experiments of mine, however, lead me to suppose that the freezing-point of the same otto may vary from time to time. It was noticed that a sample of otto (about 100 c.c.) which had been allowed to stand in an open beaker at a temperature of 30° to 33° C. for three hours had its freezing-point considerably depressed. A further quantity was similarly treated, the length of time being increased to twenty-four hours. During this time at intervals a cold basin placed over the beaker became bedewed with a small quantity of water which had evidently been dissolved in the oil. No alcohol could be detected in this condensed moisture, nor was there more than a trace of volatile oily matter. An otto which before this treatment had showed sp. gr. (30°/15.5°) 0.8535; rotation (100mm.), -2° 15'; and freezing-point, 21.4° C. (corr.) was examined after "dehydration," and I found that although its sp. gr. and rotation were scarcely altered, the freezing-point was lowered to 20.5°, showing a depression of about 1° C. I have frequently noticed, too, that if a large (20-oz.) bottle of otto be frequently melted and allowed to congeal, a small amount of water separates in drops, and the freezing-point is found to be lower than the original. I have endeavoured to effect this dehydration by means of anhydrous sodium sulphate, but so far without success; it is evident, however, that this point requires further elucidation, as it seems probable that the same otto with varying percentages of absorbed moisture will show varying freezing-points. It would thus seem preferable in all cases to work on the "anhydrous" otto.

As regards the statement frequently made that ethyl alcohol is a constant constituent of genuine otto, I have never been able to detect its presence in pure otto with certainty. The methods employed have been the iodoform-test applied both to the aqueous liquid obtained by shaking the otto with warm water and filtering, and to the first runnings of the distillate of the otto distilled under reduced pressure. A modified "flash-test" has also been tried, a test-tube half-filled with otto loosely covered being allowed to stand for a few minutes in a water-bath at 100° C., the cap being then removed and a light applied. In all samples of ottos examined a pale lambent flame has resulted, passing down the tube. Many other essential oils, however, quite free from alcohol will behave in the same way. Ever if, as suggested, the ethyl alcohol is a product of the fermentation of decaying rose-petals which may sometimes occur, it is difficult to understand how more than very minute traces can occur in the otto itself, which rises to the surface and is removed from a very large volume of water in the process of distillation. Surely such a process would ensure the almost complete washing out of any ethyl alcohol originally present. In order to determine the influence of an addition of palma-rosa oil, an otto having the freezing-point 21.5° was taken; this was mixed in the proportion of 9 parts to 1 of palma-rosa oil (by weight); the freezing-point was now 20.5°—i.e., had been depressed just 1° C.

ALCOHOLIC CONSTITUENTS AND STEAROPTENE.

The mere determination of the percentage of alcohols (by acetylation) does not afford very useful results, as palma-rosa oil consists largely of the same alcohols. The determination of stearoptene affords a further clue to the composition of the otto, but care must be taken to follow identical conditions in each determination; the usual method is to treat with alcohol (70 or 80 per cent.), freeze the solution, filter off, wash and dry the stearoptene. It is probable the separation is not quite complete; thus, if the mixture is cooled to 0° and filtered, the filtrate will usually deposit more stearoptene if further cooled to -10° C. A desideratum is some method for the quantitative separation and determination of the alcohols, geraniol and citronellol, as it seems probable that there is a much larger proportion of the

* "Chemistry of Essential Oils."

latter in the fluid portion of otto than in palma-rosa oil. Flattau and Labbé have put forward a process for their separation based on the differing solubilities of the alcoholic phthalates in petroleum ether; but the results obtained have been called in question by Messrs. Schimmel & Co.

ESTER-PERCENTAGE.

This often affords useful information, as the amount of ester in pure otto is very low, often as low as 30 per cent., while in palma-rosa oil it averages about 10.0 per cent. Hence a large percentage of the latter may be detected; low-priced ottos smelling faintly of palma rosa have been found to contain 4 to 4.5 per cent. of ester (reckoned as geranyl acetate), while the finer ottos vary from 3.0 to 3.5 per cent.

In conclusion it is evident that, in the present state of our knowledge, there is no absolutely reliable single test for the purity of otto, though much may be learned from a close study of the various characters, and especially of their relation to one another. It appears that the present "order" prohibiting the importation of palma-rosa oil into Bulgaria has not the force (as I am informed by a member of the Bulgarian Parliament) of a legislative enactment, and is practically a dead-letter. This same member, however, is endeavouring to obtain fresh legislation on the subject.

Personalities.

MR. T. F. MARCH, chemist and druggist, of Torquay, has been appointed Meteorologist for the Borough.

MR. GEORGE RANKIN, chemist, Klerksdorp (Transvaal), sails on the *Saxon* on June 16 to resume his business there.

MR. W. WATSON WILL, F.C.S., F.L.S., Principal of the Metropolitan College of Pharmacy, has been elected President of the Council of the London Forfarshire Association.

MR. D. H. MACDONALD, one of the P.A.T.A. staff since the commencement, has, on the occasion of his leaving for another appointment, been presented with a handsome photographic outfit by the executive and staff.

AMONGST our callers this week have been Mr. Ralph Parnham, pharmacist, Kaiapoi, Canterbury, N.Z., and Mr. Duncan Shaw, pharmacist, Melbourne, Victoria, both of whom have come for a summer holiday in the old country.

THE mental shock and worry which Mr. J. F. Brown, of Dover, suffered when his pharmacy was wrecked by a mob recently have, we regret to learn, induced a severe attack of erysipelas, in consequence of which he has not been able to personally acknowledge the many kind inquiries addressed to him. He asks us to make this known.

MR. LEOPOLD D'ESTREVILLE LENFESTEY, son of Mr. Gifford Lenfestey, of The Central Pharmacy, Piccadilly Circus, was gazetted on June 2 as second-lieutenant in the Royal Regiment of Artillery. He joins the B Battery of the Royal Horse Artillery, stationed at Christchurch, on June 10. Mr. Lenfestey was nominated for his commission by the London University.

MR. P. CASSELS of Messrs. Cassels & Co., British agents, Buenos Aires, Argentine Republic, is now in London on a business visit, and hopes before returning to secure several agencies for British houses connected with the drug trade. Mr. Cassels speaks favourably of future business with the Argentine; the country is in a prosperous condition, and there is a very good demand for proprietary articles. His firm are at present agents for several American specialities.

MR. J. W. CUSSENS, chemist and sub-postmaster of Osssett, Yorks, was presented by the National Federation of Sub-postmasters on May 30 with a handsome marble timepiece in recognition of his services to that body, of which he is one of the original organisers. At the dinner following the presentation complimentary references were made to the services rendered to the federation by Mr. Cussons and his *confrères*, Messrs. Rauns and Dawson, who also received a presentation.

THE port of Seville imported during 1899 drugs and chemicals valued at 88,416*l.*, against 60,129*l.* in 1898.

The Pharmaceutical Aviary.



The Beepy Bird.

This artful and diplomatic old bird has spent nearly all its life in showing the young birds of the aviary how to grow wise by looking at things in a test-tube. It ruined the inside of itself in doing this, but beautified the outside exceedingly, and made its nest so nice and comfy and feathery. Being a very, very wise bird, it lent its test-tubes to the B.P. birdies. That is how it got its name, and why the Magnesia bird pecks at it every time it passes its perch. The Beepy bird nests in ash lands, but is often seen preening itself in the Temple Gardens.

Business Changes.

Notices are inserted free in this section if properly authenticated.

MESSRS. W. JONES & Co. have opened the "Russell Pharmacy," 138 Southampton Row, W.C.

MESSRS. BOOTS (LIMITED) have opened a new branch store at 42 Drake Street, Rochdale.

MR. FREDK. C. ASHFORD, chemist and druggist, has opened a business at Far Cotton, Northampton.

MESSRS. CLARK & SON, chemists, are about to open the premises 4 Westminster Parade, Lower Edmonton, N.

THE METROPOLITAN DRUG COMPANY have acquired the premises 150 Bishopsgate Street Without, E.C., and will open as soon as alterations are completed.

MR. W. A. SAVILL, chemist and druggist, has opened a pharmacy at 3 The Parade, Wealdstone, Harrow, for which Mr. H. Mills, of Old Street, E.C., has supplied the fittings.

MR. J. WATKINS, dispensing chemist, has taken over the branch-premises of Mr. F. W. Freeman, Grand Parade Church End, Finchley, and will open as soon as alterations are completed.

MR. A. DOWNING, chemist and druggist, has recently taken over the chemist's business formerly carried on by Mr. W. Maunder at Edgcombe Street, Stonehouse, Devonport, and has converted it into a bright, attractive pharmac.

THE republic of Salvador has raised the duties on the importation of foreign merchandise by 150 per cent. Insufficient revenue is the cause.

Observations and Reflections.

By XRAYSER.

THE MEDICAL COUNCIL as an Entertainment does not seem to be duly appreciated in London. I looked in several times during the recent session of that body, and the largest crowd I found in the public balcony consisted of three persons, though there were thirteen Windsor chairs, and room for them all in the front row. The members of the Council are all clever men, some of them of exceptional debating ability, and the subjects of their discussions are often of special interest. The President (Sir William Turner), though a little deliberate and slightly prone to repeat himself, has proved his capacity to rule, and he is as just as he is decided. The presence of Mr. Victor Horsley and Mr. George Brown, two of the direct representatives, at the table ensures the due, and sometimes the undue, consideration of every little detail of business where a possible opening for discussion presents itself, and the Irish and Scotch representatives are always on the watch for any encroachments on their rights by their predominant partners. When the next session of the Council comes round—it will not be till November—I would advise chemists who can spare an hour or two in the afternoon to pay the assembly a visit. But they must be prepared for the fairly frequent annoyance of having to withdraw while the Council deliberates *in camera*.

THE COUNCIL'S ATTITUDE towards dentists' advertising was, no doubt, the most notable feature of the recent session. The wedge has been driven in, and we are a step nearer towards the realisation of the professional dream that advertising is, *per se*, "infamous conduct." But the Council cannot be said to have arrived at that point yet, not even in Mr. Oglesby's case. The caution issued a year ago, warning dentists that advertising might easily be of such a character as to amount to infamous conduct in a professional sense, is the basis on which the majority of the Council acted; but it was unsatisfactory that the particular features of the advertisements which involved the severe punishment of removal from the register were not distinctly stated. In view of the fact that every dentist—and, for that matter, every doctor—advertises himself to some extent, if only by means of a brass plate, a book, or an article in a medical journal, a visiting-card, or the cultivation of "a bedside manner," it is obvious that the practice cannot be suppressed altogether. Nor is it practicable to define how far legitimate advertising may go. It is therefore all the more incumbent on the Council to courageously indicate the exact item in any condemned advertisement which renders it objectionable.

A JURY'S VERDICT is not valid if it is arrived at by several roads. But the Medical Council seems to be under no such restriction. Some of the members, I judge, objected to the humorous element in Mr. Oglesby's advertisements; one, at least, seems to have regarded the announcement on the side of his house as infamous in a professional aspect; while others, and I should suppose the majority, condemned him on account of his American D.D.S., which he admitted to have bought and not earned in the recognised manner. I for one sympathise with a firm stand against the use of letters or designations intended to impress the public with a sense of awe which is not justified; but it must be remembered that a D.D.S. diploma is not the only article of the kind used with this intention.

THIS QUESTION OF PROFESSIONAL ADVERTISING is a curious one, and I should like to see an attempt made to explain why it is honourable for, say, a soap-manufacturer to recommend his wares, and discreditable for a dentist to expound his own qualifications. I confess to a prejudice as strong as the President of the College of Physicians or the Lord Chancellor can entertain against professional advertising. It might be good for newspapers, but it would be a gloomy experience for the rest of us if the denizens of Harley Street or of Lincoln's Inn Fields were to begin to compete with each other in the strife for clients. But do different standards of morality or social honour prevail in the soap trade on the one hand, and the tooth, the liver, or the legal business on the other? If it is dishonourable for a doctor, a lawyer, or a dentist to try by true statements to draw more clients to himself, why is it not equally so for the soap-maker?

THE SERUMS seem to be most accommodating articles. When the theory that the constitution could be rendered immune against the attacks of certain microbes by first employing microbes of a degenerate character had been fairly established, this was found to be insufficient to meet the case of the hydrophobia-bacteria. Thereupon Pasteur and his associates discovered that in this instance the degenerate microbe could be administered after the deadly one, and would catch it up and counteract its influence. Now the anti-alcoholic serum, reported upon from Paris (*C. & D.*, June 2, page 915), seems to have a new kind of action altogether. It is not clear that there are any microbes engaged in the business at all, nor is it professed that inoculation with the anti-alcoholic horse-serum will render any one immune against the effects of alcohol. Something different is required in the case, so the new serum obligingly destroys the taste for alcohol altogether. This result does not fit into any of the prevalent microbe theories, nor has a new one to suit it been constructed yet. Moreover, we have to wait to see how long the distaste for alcohol continues. And, after all, I am not sure that the present investigation is on the right lines. Perhaps a serum which would not interfere with the taste for whisky, but would prevent the next morning's effects of it, would prove the most popular discovery, and would contribute to the greatest happiness of the greatest number.

THE HIGH COURT JUDGMENT in the camphorated-oil case was emphatic but embarrassing. It rules that the only way to meet the requirements of the Sale of Food and Drugs Act when a small packed article like a 2*l.* bottle of camphorated oil is bought is to divide the contents of that particular bottle into three parts. Then, if it is the case, as the analysts say, that the third of that bottleful is too small a quantity to allow of an accurate analysis, so much the worse for the law. It simply follows that vendors may sell what they like under the name of camphorated oil as long as they confine their transactions to 2*l.* bottles.

THE BARREN GLORY OF A CONVICTION with no cash, forthcoming to meet the fine is a poor reward to the Pharmaceutical Society for vindicating the law as to the sale of poisons for the benefit of the public. Scotch sheriffs have not been noted hitherto for undue ferocity in enforcing the Pharmacy Act, but his Lordship of Linlithgow seemed disposed to make up for the laxity of some of his brethren on the Bench by locking up the attractive but unqualified young lady apprentice who had sold laudanum in the shop of Dr. Scott, of Broxburn, if her Sunday things did not yield 4*l.* 7*s.* 8*d.*, the price at which her misdemeanour was assessed. Her employer was not disposed to relieve the tension by paying the penalty which the law did not impose on him, whereupon the Sheriff recommended that the Act should be amended so as to give power to impose imprisonment in cases where the penalty was not paid. But surely the circumstances of this case suggest that a better amendment of the statute would be to make the employer pecuniarily responsible for the unlawful acts of his unqualified assistants.

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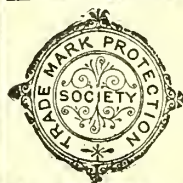
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Editorial Comments.

After the War is Over.

THE flag-flying and horn-tooting stage of the war is over now, we hope, and those who have been pecuniarily interested in it will be able to examine the ruins of their connection carefully without fear of creating the impression that they are deficient in patriotism. At any time in a man's business career it is a serious thing to compel him to shut up shop for eight months, but when there is added to that, as there has been in many instances in South Africa, the destruction of one's property and exceedingly heavy expenditure for personal safety, the termination of hostilities becomes a doubly-welcomed event.

With the opening of the war last October commercial relations between the United Kingdom and the two South

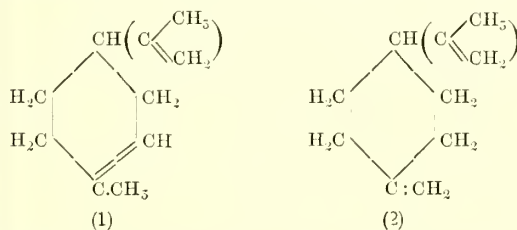
African Republics ceased; it became unlawful for British merchants to traffic with any inhabitant of either State. Now that restriction has been removed from what was wont to be called the Orange Free State, and business has been resumed with traders there upon conditions which do not prohibit the supply of medicinal and pharmaceutical goods. The occupation of Johannesburg makes available the richest and best business centre in the Transvaal, but the military authorities do not yet see their way to permit traders to return to their places of business. In a few weeks this prohibition will, it is expected, be removed, and all who before the war were in business in the Transvaal are to be permitted to return to their property. Sir Alfred Milner on June 2 published a notice to the effect that "no facilities can be offered the public for entering the Transvaal at an early date, and when this is possible it will only be conditionally." Thousands of applications have been already received, and, of course, it is those, such as the chemists of the Transvaal, who have direct business interests in the country who will have first choice. There is a general disposition to regard the present as a good opportunity for emigrating to South Africa. Chemists and druggists who have ideas of that kind may present a few facts in regard to the matter. There are five distinct pharmaceutical sections in South Africa—viz., Cape Colony, Natal, Rhodesia, the Orange River Colony, and the Transvaal. Each has a pharmacy-law of its own, and the qualifications of the first three are reciprocal. Before the war there was reciprocity between the Transvaal and the Orange Free State, but there were not many pharmacists in the latter. In the Transvaal, especially on the Rand, pharmacists were numerous, and nearly all British. They had formed a successful Pharmaceutical Society, with *THE CHEMIST AND DRUGGIST* as their "official organ," and at this time last year had almost completed with the Transvaal Government the preliminaries of a new Pharmacy Act which promised to put the registration of chemists and druggists upon a more intelligent basis than the existing one. The war put a stop to the negotiations, and the chemists and druggists on the Rand and elsewhere in the Transvaal, with a few exceptions, were compelled to quit the country. Some of them came home, but the majority went to Natal and Cape Colony, a few serving with the British army, and they will be ready to resume their old positions as soon as the military authorities permit them. It is, therefore, to be reckoned that the pharmaceutical opportunities following the war are to that extent discounted. Moreover, there have gone out as volunteer compounds several hundred young druggists, besides others in the fighting force, and many of these will doubtless remain in the country, although it is not likely that they will be relieved of their duties for some months to come. Retail chemists may therefore wait patiently for developments. For wholesalers and manufacturers matters are different. For example, the reopening of the Rand means the recovery of the potassium-cyanide industry, and probably a boom in glycerin. The exportation of these goods to South Africa during the past eight months has been greatly curtailed, but as soon as the mines are reopened the exportation will begin again. Lcaway will not, however, be made up. The South African wholesale drug-trade has also been nearly at a standstill during the war, so far as the up-country connection is concerned; and this will not be resumed completely until the military pressure on the railways is reduced greatly. The retail drug-trade of Rhodesia, the Transvaal, and the mining districts of Cape Colony is peculiar in being exceptionally heavy in regard to chemicals used in assaying and metallurgical work. It requires, besides experience, either a good banking account, or long credit to work it, and the future for this branch

of trade looks bright as the war closes. In these directions, therefore, better trade may be expected, as well as increased demand all round for druggists' goods. Happily, one branch will slacken off now—viz., that of surgical dressings, which have been at a premium during the past six months, with factories working day and night. "It's an ill wind that blows nobody good."

It is perhaps too soon to calculate how matters will be arranged politically after the war is over, but we venture to hope that some leading pharmacists will endeavour to get uniformity in the pharmacy laws of the respective States, so that there may be as great freedom in passing from one to the other of the five colonies as there is between any counties in England. Some commonwealth scheme for South Africa seems desirable, and pharmacy should be in it.

A New Terpene Theory.

A PRETTY theory, dealing with the terpenes and their alcohols and ketones, is the subject of a paper by Semmler in the current issue of the *Berichte* (xxxiii., 1455). He proposes to differentiate these bodies into two classes, and distinguish them as "pseudo" and "ortho." The origin of this suggested differentiation appears to be the fact that no bodies of this nature have been prepared which can be definitely shown to contain a double linkage in the six-carbon ring as well as a methylene group attached to the ring. The application of the theory to limonene suffices to illustrate the author's suggestion. In the subjoined formulæ No. 1 is that proposed for limonene by Tiemann and Semmler, and is now termed ortho-limonene. Formula No. 2 represents limonene with the double linking in the side chain, and is termed pseudo-limonene:—



If pseudo-limonene be treated with hydrochloric acid it would be expected to yield the same dihydrochloride as ortho-limonene. The usually accepted identity of dipentene with limonene (as the inactive variety) is necessarily dubious on account of the fact that dipentene has markedly different properties, the boiling-points and sp. grs. of the bodies being dissimilar. The chief reason for assuming the structural identity of the limonene with dipentene is the fact that mixtures of the two limonenes in equal quantity yield identical crystalline compounds with those of dipentene. Semmler suggests that the so-called dipentene is largely composed of pseudo-limonene, which from its structural formula can be seen to be optically inactive, and it would naturally yield saturated derivatives identical with those afforded by ortho-limonene. Similar suggestions as to pinene and other bodies are made. We may point out that it is in the tetra-derivatives that this identity would naturally appear, but, as a matter of fact, the tetra-bromides of the two limonenes melt at 104° C., whilst dipentene tetra-bromide melts at 124° C. Nevertheless, the theory is one which deserves careful consideration, especially as it throws light on the peculiar existence of two dextro-limonene nitroso-chlorides and two similar laevo-limonene derivatives.

Division of the "Minor."

STRINGENCY AND FAILURES COMPARED.

LAST week, in discussing the proposal to divide the Minor examination, we referred solely to the changes which have been made in the syllabus or schedule of the examination since 1868. It will be remembered that a Committee of the House of Commons which was appointed to inquire into the sale of poisons and the qualifications of those who should be entrusted with that sale, and had put before it the nature of the Minor and Major examinations then existing, and deliberately chose the Minor, because it was led to believe that the Major provided a higher qualification for those who compounded and dispensed prescriptions. We say nothing now in respect to the wisdom or otherwise of this choice, but it is plain that the fact cannot be overlooked in any proposed division of the examination which requires fresh parliamentary powers. In view of the whole circumstances of the case, division under the present powers would be the most politic move, especially as it could be extended optionally—that is, without debaring anyone from passing the whole of the examination at one time if he so desired. That point will come up for discussion later. Meanwhile we submit a table compiled from the Registrar's yearly returns of the Minor examination passes and failures since 1839. In this the London and Edinburgh results are combined to give the percentage of failures, for although the differences observable in the two centres up to ten years ago were wide, they do not affect the issue:—

—	Examined	Passed	Failed	Failures per cent.
1870	316	226	90	28
1871	371	234	137	37
1872	507	287	220	43
1873	820	456	364	44
1874	1,160	378	782	70*
1875	285	141	144	50†
1876	468	232	236	50
1877	536	299	237	44‡
1878	639	324	315	49
1879	656	340	316	48
1880	653	311	342	51
1881	650	325	325	50
1882	650	286	364	56
1883	766	294	472	62
1884	880	326	554	63
1885	955	351	604	63
1886	1,070	398	672	63
1887	1,082	506	576	53
1888	1,091	510	581	53
1889	1,013	439	574	56
1890	1,157	524	633	54
1891	1,516	681	835	54§
1892	871	358	513	47
1893	1,189	469	720	60||
1894	1,410	524	886	62
1895	1,304	447	857	65
1896	1,449	503	946	65
1897	1,441	460	981	68
1898	1,679	535	1,144	69
1899	1,816	552	1,264	69¶

* New syllabus introduced October.

† Minimum age 21 years introduced.

‡ Three years' experience required.

§ New syllabus introduced October.

|| Poisons added to syllabus. Fee increased to 5*l.* 5*s.*, and teaching examiners arranged.

¶ Syllabus revised and added to.

It will be noted first that an impending change is indicated in the table by heavy entries, obviously of the unprepared, seeing that failures have usually been abnormal in these years marked by black type. Secondly, although the percentage of

failures has steadily increased the figures reveal the fact that students have adapted themselves on each occasion to the new conditions. The high-water mark of failures in 1874 (70 per cent.) was immediately followed by a reduction to 50 per cent., and when the three years' experience was introduced in 1877 the failures declined to 44 per cent. Again, after the curriculum controversy period, 1832–86, there was a distinct improvement, although no slackening of stringency, and the new schedule had a good effect until the little extra *b* was added in 1893. Since then failures have steadily increased, and two changes in the conditions of the examination have been made which cannot be isolated from these changes. The table is well worth careful study. During the first few years more entered for and passed the Modified examination, which fact must not be forgotten by those who think that more pass now than the Nevertheless, there has been a steady growth in desire to qualify—a desire which during the past decade has been due to increased demand for qualified assistants. It is also noteworthy that since the early eighties, when the majority of candidates were self-taught and the examination was much easier than it is now, failures have been progressively fewer. The influence of the schools is apparent in the improved conditions of 1837–92—at least, we can think of nothing else to account for that comparatively brilliant period.

Medical Preliminary Examination

THE decision of the General Medical Council in reference to the Examination in General Education brings to a close a movement which has almost as much interest for chemists and druggists as for medical men, particularly in view of the fact that the regulations of the Pharmaceutical Society now practically identical with those of the General Medical Council. Now that something like finality has been reached in the matter we may recall the more recent history of the question and the proceedings of the General Medical Council in reference to it. The question of raising the standard of the preliminary education of medical students has been for several years under the consideration of the Council, which had long felt that the standard of the Preliminary examinations passed by the majority of the students was much too low. After lengthened discussion the Council four or five years ago framed a list of examinations whose certificates would be accepted, and they gave notice that on a certain date the new regulations would be brought into force. This list consisted of two classes of examinations, in one all the subjects were required to be passed at one sitting, and in the other the subjects might be taken at not more than two examinations. It was first intended to introduce the new scheme at an earlier date, but in June, 1893, the Council agreed that it should not come into force till January, 1900. In December, 1893, the Education Committee were forced to admit that there were difficulties ahead, and the Council passed a resolution requesting the committee to consider and report to the Council during the next session as to the earliest date at which it would be practicable to raise the minimum requirements of the Council as regards Preliminary examinations to the standard of the senior or higher examinations now required. Six months elapsed, and in June, 1896, the Committee virtually confessed that they had nothing to report. They found the work beyond them, in fact, and at their request the Council agreed to call in the assistance of three experts—viz., the Rev. T. W. Storer, C.B. (formerly H.M. Chief Inspector), for England and Wales; Mr. McGrath, Dublin, for Ireland; and Professor McCormick of

St Andrews University, for Scotland. These experts presented their report last December, and the Council could hardly have been more surprised had a mine exploded at the feet. One member after another expressed disappointment with the report, and ultimately it was decided to ask the experts to state the grounds on which it was based. To this the experts replied in effect that it is impossible to raise the standard to the point required by the Council, and if it were attempted the result would be to defeat the end in view. This report was presented, and the committee reappointed six months ago, and last week their second report was submitted to the Council. From this it appears that the experts took as the standards of the two sets of examination the Leaving Certificate examinations of the Scotch Education Department, the junior standard being represented by the Lower-grade Leaving Certificate, and the senior by the higher-grade Certificate. In pursuing their investigation they had every assistance from Sir Henry Craik, the head of the Scotch Education Department. The first conclusion of the experts may be quoted in their own words, the italics being ours:—

We found that a Preliminary examination which would demand Scotch Higher grade Leaving Certificates in the four subjects required by the General Medical Council, would be of a standard much higher than that of Preliminary or Matriculation examinations in any faculty of any University with which we are acquainted. We see no necessity for enforcing, and no possibility of maintaining, such a standard.

The experts go on to say that such a demand "would but tend to aggravate the vital defect . . . and candidates would have to rely more than ever upon getting a pass by means of unintelligent memory and cram." The experts then proceed to elaborate discussion on the estimation of the educational value of a Preliminary examination, the points taken up being (1) The character of the paper; (2) The distribution of marks; (3) The standard of marking; (4) The minimum percentage of marks required for a pass; (5) The standard of test at which the paper aims; and, lastly, Must the candidate pass all subjects in one examination, or at no more than two examinations, or may he pass each subject at separate examinations? It is unnecessary for us to deal with these points in detail. The experts recommend, as far as possible, examinations on work that is not prescribed, and at present the only representatives of this class are the Oxford and Cambridge Schools Examination Board, the Scotch Leaving Certificates, and the Preliminary examination of the Joint Board of the Scotch Universities. In all other examinations a portion of the work is prescribed. They further recommend that candidates be allowed to pass in one subject at a time in those examinations which are inevitably of a higher grade than the proposed reformed standard, and "that in all the other examinations which approximate to the proposed standard to the satisfaction of the General Medical Council, candidates shall be permitted to pass the four subjects at not more than two examinations." They are distinctly opposed to the policy of compelling all the subjects to be taken at once. "A pupil who knows two subjects thoroughly, or three subjects well, is in most cases better educated, and better fitted to deal intelligently with the fresh subjects of a professional training, than a pupil who knows four subjects, and all indifferently." The concluding part of the report deals with the proposed standard, and the experts recommend that "in each subject the minimum standard and range of questions should approximate as nearly as possible to the standard and range of questions in the papers of the Lower-grade Leaving Certificate examination of the Scotch Education Department," the examination which presumably stands at the head of what are classed as the examinations on the Junior standard. The

only other recommendation made by the experts is that no medical student should be registered under the age of 16.

This comprehensive report may be said to have bewildered the General Medical Council, but it need not have done so had they been careful to distinguish between one examination and another. It is too true that many of the examinations hitherto recognised were of a miserably inferior standard, but the mistake was in classing all so-called lower-grade examinations in the same category, the fact being that the Scotch Lower-grade Leaving Certificate is of more value than some so-called Senior Certificates which we need not specify. The bearing of the report, and the latest decision of the General Medical Council on the new regulations of the Pharmaceutical Society, we must reserve for another occasion. In the meantime it will be noted how completely and independently this report justifies the division principle which has been adopted for the pharmaceutical preliminary.

SOUTH AFRICAN TRADE.

Soon business relations with the whole of South Africa will be re-established, and new enterprises will be set on foot. The chemical and drug trades will have a share in these, and we may remind manufacturers and merchants of the perfectly unique position which THE CHEMIST AND DRUGGIST holds as a medium of communication with the South African trade. The regular correspondence from the front (much of it from colonial pharmacists) which we have printed since the war broke out has been a revelation to many at home of the *C. & D.*'s influence, but that fact is only one bit of evidence of our established connection with South Africa. All the Pharmaceutical Societies that there are in South Africa (Cape, Natal, Rhodesia, and the Transvaal) subscribe for THE CHEMIST AND DRUGGIST for the whole of their members, and most of the chemists and druggists unconnected with the Societies subscribe for it direct. The natural deduction is, if business houses wish to get into touch with South African buyers, they cannot do better than advertise in THE CHEMIST AND DRUGGIST. There is not a part of the British Empire to which the same does not apply.

THE "CROWNER'S QUEST."

We report a coroner's inquest from Manchester during which the Coroner put some pertinent and impertinent questions to a registered chemist and druggist who has been managing a shop on behalf of the executors of a chemist and druggist. There is something to be said for the Coroner's statement that the addresses on the register are those by which such official persons as he are bound, and fullest evidence might at any time be required from any registered chemist to prove that he is the person referred to in the register. The Coroner was wrong in his statement with regard to the name required for the label. Under the 17th section of the Act the address should be that of the person on whose behalf the sale is made. The executors of a deceased chemist are "a person" within the meaning of the Act.

BOER BULLETS.

There has been a good deal of controversy lately in regard to the greasy coating which has been found on Mauser cartridges used by the Boers in the present war, and we recently reported that Mr. Treves, the eminent surgeon, had had an analysis made, the result of which went to show that the coating did not contain verdigris, so that the allegation that the coating is a poisonous mixture of verdigris and paraffin was disproved. We have recently received from a correspondent who is with the British fighting force a sample of the material scraped off bullets found in the Boer trenches

between St. Peter's Station and Colenso after the relief of Ladysmith. Our correspondent remarks that "this is said by the Boers to be put on to preserve the rifles, but some people suggest that it is put on for a different purpose." Mr. E. J. Parry, B.Sc., F.I.C., has analysed the few grains of the material, and reports that "it consists of about 50 per cent. of paraffin-wax and a mixture in practically equal proportions of copper and nickel salts, chiefly carbonate and hydroxide." This settles the question as to whether the material contains copper or not. From inquiries that we have made we are led to believe that the coating put on by the Boers is simply melted paraffin-wax, and that it is used to prevent fouling of the rifles. The Mauser cartridges have been a long time in stock—one that we saw was dated 1893—and no doubt as a result of storage some hydration of the nickel and copper constituting respectively the coating of the bullet and the wall of the cartridge would take place. A shooting expert informs us that many of the Lee-Netford cartridges which he uses for shooting are spotted with green patches (copper and nickel hydrates), and it seems to us reasonable to suppose that in the case of the Boer cartridges which have been so many years in stock this hydration would have taken place before the paraffin was applied. Since smokeless gunpowder was introduced the worst thing our riflemen have had to contend against is the pitting of the rifles by the nitrous fumes in the products of decomposition, and a slight coating of paraffin is the best thing to prevent this fouling.

A NEGLECTED FIELD OF STUDY.

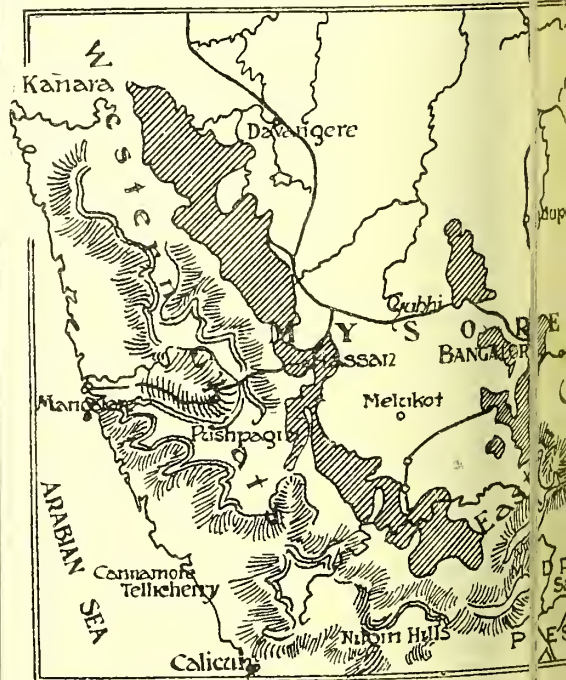
The Horticultural Society's annual show, which has recently been held at the Temple Gardens, offered to pharmaceutical botanists opportunities which are unique. Leaving out a description of all the beautiful flowering plants which were on show (and these, by the way, are the finest that the world can produce), the immediate objects of interest to pharmacists were numerous. The cacti exhibit contained several specimens of *Cereus* and many varieties of *Opuntia*. Wonderful specimens of crotons (amongst them *C. Tiglum* and a variety of *C. Eluteria*) were seen, but it is only on account of their beautiful foliage that these are such favourites in conservatories. "What lovely irides!" said a lady at the *C. f. D. man's* elbow. They were magnificent, but the word caught our representative's ear, and suggested more care in using the plural of words horticultural. Iris, irides; orehis, orchides; cactus, cacti; and crocus, croci, are renderings which we often hear violated. Vanilloes is the term used in Mincing Lane for describing the fruits of *Vanilla planifolia*, and "Bigareau" is the correct adjective to apply to a variety of cherries which will soon be plentiful—not "biggaroon," as the Covent Garden salesman puts it. There was a splendid specimen of the vanilla-plant, in full fruit, on show. A collection of economic plants in good healthy condition, ready for shipment to the colonies, was of interest, and comprised *Hevea brasiliensis* (Para rubber), *Castilloa elastica* (Panama or Nicaragua rubber), *Theobroma Cacao*, var. *Chrifolia* (Caracas cocoa), and *Coffea robusta* (a new and very prolific variety of coffee-plant). Many chemists who are seedsmen will know the prices of some kinds, but our representative had an opportunity to chat with an eminent F.R.H.S., who told him that his grandfather was the first to introduce the spotted calceolaria to this country, and to raise it from seed. "The seed used to fetch 10s. an ounce then," he said, and added, "we used to grow nothing else in several large houses; but now—well, we grow a little for our own use only. Like every other trade, seed-growing has suffered by competition from the Continent."

THE RESULT OF PROTECTION.—In Vienna there are 111 pharmacies for a population of 1,583,978, or one pharmacy for 14,270 inhabitants.

Produce Notes.

SANDALWOOD OIL.

IN Messrs. Schimmel & Co.'s semi-annual report recently published are some interesting remarks regarding sandalwood and its oil, the prices of which have been advancing owing to the higher rates paid for the wood at the auctions. It is hardly necessary to mention that the sandalwood tree is a monopoly of the Indian Government, and its home is in Mysore. It is, however, also found in Coorg and in some districts of the Bombay and Madras Presidencies; but the State of Mysore comprises about seven-eighths of the whole trade. The total area of the sandalwood plantations is estimated at about 5,450 square miles. It is interesting to note that, according to the new classification introduced in 1898, there are no fewer than eighteen different kinds of wood sold, from first-class trunk wood down to chips and sawdust. When the trees are full-grown they are dug out and transported to the warehouses (called "kothis" where they are freed from the bark and sorted into rough trunk, or branch wood. The stocks of wood are annually sold by public auction in November and December, and every endeavour is made to satisfy the buyer—e.g., the parcels are allowed to remain in the warehouse, rent free, for three months. Combinations among the purchasers having for their object the forcible depression of prices have been met by withdrawal of the wood from sale. Most of the wood is sent its way by rail to Bombay or the ports on the West Coast, such as Goa, Hanovar, Kundapur, Mangalore, &c. Thence it is shipped to Europe and China, and to other parts of India. We give below a reproduction of a map showing



(in shaded lines) the sandalwood district of Mysore, the original of which appears in Messrs. Schimmel's report.

PEPPER-CULTIVATION IN JAVA.

It is said that some enterprising Europeans will shortly take up the cultivation of pepper on a large scale in the eastern part of Java, on the slopes of the Trawas mountains, where coffee, cocoa, and sugar-cane are grown with excellent results. At present pepper is grown there by the natives, but only in very small quantities. The proposed large plantations will be laid out as soon as the necessary ground can be obtained on lease from the Government; but there appears to be some uncertainty about this point, as large tracts are reserved for the Government coffee-plantations, and applications for leases for the cultivation of cocoa have recently been refused.

For the Doctors.

THE average London consultant is, nowadays, a difficult man to get at by that ubiquitous person the "chemists' traveller," who, like the proverbial cloak, covers a multitude of efforts. The originators of the Medical, Surgical, and Hygienic Exhibition have in a measure solved the difficulty by inviting the medical men of the Metropolis and their immediate helpers, nurses, to see what is new in medicine and surgery once a year in the Queen's Hall, Langham Place. There has been a little looseness in the issue of the invitations this year, and doubtless many connected with pharmacy in London will hear of the matter for the first time when they receive THE CHEMIST AND DRUGGIST this week. If they wish to see what is to be seen in the Queen's Hall they must haste, because it closes on Friday evening, June 8. The exhibition appears to be as well supported as ever this year, but we shall not attempt to describe the exhibits in detail.

Some time ago we described the method of treating various diseases by means of electric light. There is an exhibit of the arrangements for this as designed by Mr. H. J. Dowsing, the patentee, and this includes a special flannel suit for the patient to wear. The Domes Belt Company exhibit their surgical appliances, special prominence being given to their "belt-corsets." Visitors are attracted by the Geneva cross boldly displayed on a large book of charts such as are used in the hospitals in South Africa and in numerous hospitals at home and abroad. They are printed by Messrs. Wodderspoon & Co., and provide for the registration of temperature in Fahrenheit or Centigrade degrees, and for pulse registration and other clinical data. The Protene Company (Limited) make a very full display of their various prepared foods which they make from the exceedingly rich and digestible nitrogenous food-substance that they prepare from milk. These foods, in the unsweetened condition, are employed largely by diabetics. Messrs. Anderson, Anderson, & Anderson (Limited) have a good exhibit of water-beds, air-cushions, and other invalid and nursing specialities made from indiarubber. Messrs. Wyleys (Limited) are *vis-a-vis* to them with a well-displayed assortment of pharmaceutical and medicinal products. These include several new forms of glycerin suppositories, such, for example, as ichthyol and glycerin suppositories, which have been found to be of special service in uterine disorders. They have also ophthalmic and other ointments in tubes, each ophthalmic tube being supplied with a small boxwood attachment to screw upon the outlet, which enables a thin thread of the ointment to be discharged into the eye. Compressed pellets are a feature of this exhibit, and one of these struck us as being specially worthy of mention. It is an "infant's corrective pellet," consisting of a fraction of a grain of calomel and bicarbonate of soda, with a chocolate basis. Tiny tots take these without hesitation, and they do them good. Another nice thing that we noticed here was sapelette powder, which is a non-alkaline antiseptic soap well charged with thymol, and put up in tins with a dredger, so that a surgeon can discharge into his wetted palm sufficient of the powder to produce a good lather for the hands, and this without contaminating the rest of the soap with micro-organisms. There has been a good demand for this by surgeons at the front, and the firm have sent forward quite a lot of it.

Messrs. Arthur & Co., who have for some years been making a speciality of chemical products, show this year a variety of their bromaurum. It is a red solution of oxybromide of arsenic and gold, and has been used with good results in the treatment of rheumatism and neuralgia. This is a modification of a similar preparation hitherto employed for migraine. Each drachm of the solution contains $\frac{1}{2}$ gr. of the oxybromide, and 10 minims appears to be the maximum dose. Messrs. Pate, Burke & Co. exhibit their "Petanelle" wool surgical-dressing, which chemists and druggists may remember is spun from peat-moss fibre. One of the most interesting things in the Exhibition is "Kelpion," manufactured by the Kelpion Company. This is an ointment containing 5 per cent. of iodine. It is much blacker than iodine-ointment usually is, yet on rubbing it into the skin no stain is left, the ointment being quickly absorbed

and the iodine with it. The iodine exists in the free state in association with oils, and we are assured that there is no chemical combination whatsoever. Of that we are not quite convinced, but undoubtedly "Kelpion" has properties totally distinct from any other iodine ointment that we have seen.

Messrs. Southall Brothers & Barclay (Limited) exhibit chiefly articles which specially appeal to nurses, such as nurses' bags and baskets, ambulance-cases, baby-scales, nurses' wallets and pocket-cases and chatelaines, and various forms of their sanitary specialities for ladies. Messrs. J. & G. Cox (Limited), the well-known gelatin-manufacturers, have a good display of their manufactures, including "Wanda" flavouring-essences and "Elfin" tablet jellies. The Sanitas Company (Limited) show a complete line of their antiseptics and disinfectants. There is a good exhibit by the Elberfeld Company (Limited) of their synthetic products, and the British Somatose Company (Limited) also exhibit their remarkable invalid nutritives. We also noted that Messrs. J. Defries & Sons (Limited) have an exhibit of the Pasteur-Chamberland filter. Izal is also there, and Messrs. Ingram & Royle (Limited) show Vichy, Carlsbad, and Hunyadi Janos mineral waters. The Plasmon Syndicate (Limited) have a good position for their product, of which we hope to say more on another opportunity; and Messrs. Burgoyne, Burbidges & Co. have Von Heyden's pharmaceutical products well displayed, these including Creosotal and Duotal. Messrs. Major & Co. (Limited) have Eucryl preparations on show; and Mr. Henry Nestlé, in addition to exhibiting the well-known infants' food and condensed milks, made a striking display of advertising novelties, patriotic postcards being the most recent: they show types of the British Army. Messrs. Cadbury Brothers exhibit their cocoa, and the Berkefeld Filter Company various forms of their filter, including the one which has been supplied to the Army in South Africa.

Mr. E. Merck, through Mr. Frederick Boehm, manager of the British branch, exhibits pharmaceutical chemicals, and a fine series of natural active principles as well as synthetic products and serums. It is a small yet attractive exhibit. The Worth's Food Syndicate (Limited) are making a show of their "Cheltine" foods, which comprise diabetic food and biscuits, anæmic food and biscuits, an infants' food, and other products. These foods are a combination of cereals, well proportioned and carefully prepared. We also observed an excellent exhibit of Messrs. Van Abbott's well-known diabetic foods. The firm still go on perfecting their gluten loaf, which now contains 61.9 per cent. of gluten, only 4.5 per cent. of carbohydrates, and 1.21 per cent. of ash, the rest being moisture. It is a palatable loaf too. There is a martial tone on this occasion about the Bovril show, owing to a big display of emergency rations and military foods. Virol and stannoids also get prominence. Messrs. Parke, Davis & Co. are showing, for the first time we believe, an analgesic called Chloretone. This is a white crystalline body with the formula $C_7H_7Cl_2O$, and is stated to be made by acting upon equal weights of chloroform and acetone with caustic potash. Drs. Houghton and Aldrich find that it is superior in many respects to morphine, chloral, and trional as a hypnotic, and is not without analgesic effects, the dose being from 6 to 20 gr. Besides this, Messrs. Parke, Davis & Co.'s exhibit comprises specimens of the most important of their products, which are attractively displayed, and include typical examples of fluid-extracts, serums, and Mosquera beef-products. We noticed here an attractive new showcard for the euthymol preparations.

Mr. W. Martindale's exhibit is the one next in order, and there is here an immense variety of pharmaceutical products such as West-end consultants are ordering every day, so it is a liberal pharmaceutical education to spend half an hour at the exhibit. Hollow suppositories are a feature, and erythrol nitrate and nitro-glycerin tablets are exhibited by the pound. Dr. Harrison Martindale informed us that erythrol nitrate tablets have caught up to the nitro-glycerin ones, and they seem not to produce the distressing headache that is characteristic of nitro-glycerin. The success which has attended the introduction of the urine test-case designed by Dr. Harrison Martindale has suggested a bacteriological test-case. This is on show, and is an exceedingly compact polished-wood cabinet containing all the reagents and stains that are necessary for the detection of tubercle,

liphtheria, typhoid, and other pathogenic micro-organisms, besides the requisites for collecting the infected material, and the needles, forceps, spirit-lamp, and other pieces of apparatus for the manipulation of bacteriological specimens, and microscopically examining them.

Messrs. Oppenheimer, Son & Co. (Limited) have an excellent display of their palatinoids and other pharmaceuticals. Messrs. Stephen Smith & Co. (Limited) are making a feature of their "Keystone" Burgundy, as well as Hall's wine; and Messrs. Cooper & Co. show a series of "Globena" nutritive essences (beef, chicken, &c.), and their oxy-carbonated waters and special pharmaceuticals. Jeyes' Sanitary Compounds Company (Limited) show all their antiseptics and disinfectants, and we observed a full line of the Fairchild products manufactured by Messrs. Fairchild Brothers & Foster, of New York and London. There are also exhibits by the Liebig's Extract of Meat Company (Limited), Messrs. F. Newbery & Sons (who showed principally Messrs. W. R. Warner & Co.'s pharmaceutical preparations, especially the effervescent mineral-water tablets, and one for obese subjects), Messrs. J. F. Macfarlan & Co. whose exhibit included surgical dressings and morphine derivatives), Cerebos (Limited), and Messrs. G. Nelson, Dale & Co. (Limited), and the Edgar's Croup Lotion (Limited). Messrs. Nelson, Dale & Co.'s "Hipi" is, we understand, making good progress in the esteem of the medical profession.

We have not attempted in the foregoing to touch upon the surgical exhibits. There are several of these which specially appeal to operative surgeons. Messrs. S. Maw, Son & Thompson, in addition to a display of surgical dressings, have a small but excellent one of surgical instruments, and here a feature is made of cases of instruments with skeleton trays, so that it is impossible for dust or dirt to collect in them, while the cases are so constructed that the trays can be readily removed and placed in a hot-air or other steriliser.

Consular Counsel.

TRIESTE

A port is making little, if any, progress. Some sixty years ago it held the twelfth position in the list of the world's commercial centres, but, according to Mr. Consul Churchill, has not been able to maintain that position, as Hamburg is now attracting much of the trade that hitherto went to Trieste. Little hope is entertained of improvement, as it is not a free port and the harbour accommodation is poor.

BORDEAUX.

An intelligent statement by Mr. Consul Hearn contains a great deal of direct interest to the drug-trade, the chief subjects discussed being the wine-trade. Scattered throughout the sixty pages of the report (F.O., No. 2,415, 34.) are little gems of information relating to imports and exports, of which the following are samples:—

Olive oil, 7,340 cwt. exported, against 6,315 cwt. in the previous year; castor oil, 3,151 cwt., against 4,733 cwt.; ground-nut oil, 811 cwt., against 12,760 cwt.; and cotton-seed oil, 1,899 cwt.; gum of tartar, 37,832 cwt., against 32,303 cwt.; glycerin, 1,03 cwt., against 1,996 cwt.; raw tartar, 2,185 cwt.

It is satisfactory to learn we are doing an increasing business in chemicals with Bordeaux, the imports from Great Britain showing an augmentation of 164,345 cwt. (values would have been more to the point) over those for 1898. We did more than half the trade, our shipments amounting to 9,570 cwt. out of a total of 1,187,385 cwt. In what lines we excelled we are not informed; but here are the exports, the figures in brackets being those for 1898:—

Sal ammoniac, 9,924 cwt. (7,751 cwt.); chemical manure, 3,910 cwt. (77,867 cwt.); coal-tar products, 367,570 cwt. (7,582 cwt.); copper sulphate, 229,192 cwt. (266,088 cwt.); and carbonate of soda, 921 cwt. (2,768 cwt.). Other items were: stic soda, 198 cwt.; carbonate of magnesia, 412 cwt.; chloride lime, 269 cwt.; glycerin, 1,167 cwt.; and others not specified, 63 cwt.

Out of a total of 179 cwt. toilet-soap (principally transparent) imported, Great Britain sent 172 cwt.—an increase of 109 cwt. over the previous year. Evidently British soap is unrivalled at Bordeaux.

Photographic Notes.

By a Pharmaceutical Camerist.

CRYSTAL PYROGALLOL.

Mr. J. E. Lockyer, wholesale photographic chemist, 87 Evelyn Street, Deptford, S.E., has brought out a pyrogallol in small hard crystals. This form differs from the sublimed variety in occupying much less bulk. The price is practically the same as the old form of the chemical, and it is used in identically the same way, not having lost any of its solubility by the newer way of presenting it.

BLUE FOCUSING-SCREENS.

Most of us are familiar with the blue spectacles some people use when focussing to render the view on the screen in monochrome. It has recently been suggested that a focussing-screen stained blue would be a better means of attaining this end. Blue ground glass is not, as far as I can find, obtainable commercially, but there should be no difficulty in making a substitute by developing and fixing a slightly fogged dry plate, and, after washing, immersing it in a solution of water-soluble aniline blue. Household blue does the trick quite as well, but does not yield any profit to the dealer, as the article is one usually bought at the grocers' or oil shops.

AT THE PARIS EXPOSITION

It will be wisest to confine oneself to hand-camera work. If a stand-camera is used in the grounds of the Exhibition, it will be necessary to pay a fee of 25f. for a short day's work, or 1,000f. for the whole period of the Exhibition. The restriction applies solely to cameras supported on tripods, so that it is not necessary to use what are generally known as hand-cameras under this regulation. On the other hand, a hand-camera supported by a tripod comes under the fee regulation. I am expecting some tall batches of films to develop when two of my customers return, at the end of June, from a holiday in Paris. It should be noted that hand-cameras can be used all day long at the Exposition, but stand-cameras only up to 1 o'clock in the afternoon.

PHOTOGRAPH EXHIBITION.

The next exhibition of the Royal Photographic Society is to be in the New Gallery, Regent Street, from October 1 to November 3. The increased space at the New Gallery has afforded the Society an opportunity they have long wanted of widening the scope of the exhibition. It is proposed to provide five sections: (1) Pictorial photography; (2) general professional work; (3) photographic apparatus and materials; (4) photo-mechanical processes; and (5) scientific photography and photography in its technical applications. There are to be no medals in the professional division. It is as well to be conversant with the conditions of the exhibition, as, although I have not sent anything in of late years, several of my customers, who are would-be exhibitors, expect me to have all the details handy.

A NEW RESTRAINER.

Potassium boro-tartrate has been suggested as a restrainer in place of bromide. Mr. B. E. Edwards, who makes the suggestion, claims that whereas bromide of potassium retards development, and so alters the scale of graduation, giving greater density in the high lights, and cutting out detail in the shadows, potassium boro-tartrate restrains in the opposite direction. It holds back the density without interfering with the detail, and renders weakening of the developer unnecessary. Potassium boro-tartrate is familiar to chemists under the name of soluble cream of tartar. It is made by heating together cream of tartar and boric acid with water, and evaporating to dryness. Soluble cream of tartar has been used in medicine, but is better known to pharmacists as a pill-excipient. In photography it is recommended to be made into a 10-per-cent. solution, of which 10 to 30 minims is to be added to each ounce of mixed developer. As a restrainer potassium boro-tartrate works best with pyrogallol or kachin. Photographic chemists should be ready to supply either the salt or a 10-per-cent. solution.

Corner for Students.

THE MINOR IN EDINBURGH.

A SUCCESSFUL candidate at the Minor examination in Edinburgh in April sends the following account:—

The paper I had in dispensing from Mr. Boa was this:—

Make 4 fl. oz. syr. calcis lactophosph.

Ferri et quin. cit.	...	...	...	gr. ij.
Inf. calumbæ ad	3ss.

Mitte 3iv.

Sig.: To be taken after dinner daily.

Quin. sulph.	gr. ij.
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Ft. pil. Mitte vj.

Sig. One when the pain recurs.

Pot. chlor.	5j.
Ac. hydrochlor.	ij xv.
Syr. aurantii	...	...	...	3ss.
Aq. ad	...	...	...	3vj.

M.

Sig.: The chlorinated gargle.

Make 2 fl. oz. syr. aromat.

There is a catch [—ED.] in the mixture, and if one were not careful he might label the whole to be taken in one dose. Mr. Jack took me in chemistry. I had to take the sp. gr. of a liquid lighter than water. I lost an hour over this, as the balance was out of order and I had to wait while it was put right. Then I had to estimate sodium thiosulphate with iodine. After this I got a complex salt, which I found to be pot. chloride and tartarated antimony. Next morning I received notice that I had passed, and was told to appear for the oral part of the examination the following week.

In the oral examination the first subject was prescription-reading. I read four prescriptions, in which I detected some large doses, and then wrote four prescriptions out in full Latin. I was then taken over a number of doses.

Mr. Jack then took me in chemistry. "How is ethyl alcohol prepared?" I had to give the whole process, starting with the grain. "How is ethyl acetate prepared?—and write the equation." Also methyl alcohol. I was next given a metal, and asked what it was. It was lead. I then had to say how it was obtained, and how its salts were formed. I finally had to describe the making of a thermometer.

Mr. Davidson next took me in pharmacy. He handed me an extract, and asked what it was. I said it was ext. ergot. liq., and was required to say how it was prepared. I was then asked the preparation of a number of extracts, and their strengths. I was required to describe the process of sublimation, and name any official drugs obtained in that way. Then I described destructive distillation, and was required to name any official substance obtained by this process.

Botany was the next subject. Professor Balfour took me in this. He asked me about tendrils—how many kinds there were, and of what use were they to plants? What was the use of light? What was chlorophyll, and of what use was it? I was next asked to describe assimilation and transpiration, and shown *Taxus baccata*, and asked if it were male or female. How did I know? I next had to recognise Scotch fir, broom, lavender, and rosemary.

I finished with Mr. Fraser in materia medica. I was shown about twenty specimens, and asked to distinguish the different leaves in a mixture of leaves. I sorted out senna, coca, and hamamelis.

I then had to wait for the result, and felt very relieved when Mr. Boa told me I had passed.—R. S. W.

COLLEGE NOTES.

ON Monday last the students of the Leeds College of Pharmacy travelled to the Lake District on a botanical excursion. A start was made at 4.40 A.M. from Leeds, Windermere being reached about 9.30. After partaking of lunch the party proceeded to Bowness, where boats were in readiness to convey them to the richest botanical spots on the lake-side. A very large number of specimens were obtained and described, a most enjoyable day being terminated by the journey home at 6 o'clock.

AN INDIAN EXPERIENCE.—An interesting letter has been sent to us by Mr. Chas. Turner, F.C.S., Principal of the Manchester College of Pharmacy. It is from a pupil who passed his Minor and Major examinations from the Manchester College in 1893, and who is now an assistant in Mussoorie (Northern India). In the course of his remarks the writer says:—

The climate is very like that of England—slightly warmer in summer, but frequently quite as severe in winter. The rains start about January 15 and last from three to four months.

I have known it rain for a week, night and day, without a break. During this period the landscapes are magnificent. The trees and rocks become almost completely covered with mosses and ferns, and a pair of boots not worn for three or four days become quite picturesque.

I am quite satisfied with the venture I have undertaken, but I should like you to warn any intending trippers out East who may be at college not to accept as characteristic all that is written by the contributor to the *C. & D.* (December 30, page 1072). To allow marriage is exceptional, and 200r. per month is the usual salary. You can only afford to keep a very ordinary pony, and there is no time to fool about races in the season. From April 1 to September 30 we open at 7 A.M. and close at 7 P.M., 4 hour for breakfast, and one hour for lunch. Rooms provided on the premises, and duty night and day (including Sundays), with two evenings and part of Saturday afternoon off duty, and wherever you go, whether to church, theatre, bed, or on a visit, you are liable to have prescriptions to disturb you. The only satisfaction is that customers pay a good professional price for your services and goods, that you are too busy to think of your troubles, and know that Messrs. Boot won't open a branch here for some time. For the rest of the year we open at 8.30 and close at 5, but there is such a stagnation that after a month of it we would give half our salaries for something, either work or pleasure, to go in for, and we make a practice of pretending to take stock for about two months to kill time. In the season we have a billiard club, a fine skating-rink with theatre attached, and we have a fair number of dances. Cycling is not allowed; cricket and football are almost impossible. There is a small racecourse, where sports are held every Saturday afternoon when it is fine. Riding is the chief pastime, and it is sufficiently dangerous on these mountain roads to be interesting, especially when with a "ladye faire." There is also good shooting to be had. As far as a chemist's assistant is concerned, however, these pleasures do not count much. He is followed about in all directions by everlasting servants with chits, and to be lugged out half way through a valley is, to say the least of it, swearable. My employer had his training with Allen & Hanburys, and is certainly a credit to them. He is a Ph.C., takes particular care in preparing his galenicals, and has the reputation of keeping only the best materials in stock. As it is to our interest to keep on good terms with the medicos, we leave prescribing and extracting alone; otherwise the experience to be gained is very good. We have the ex-Amcer, Yakub Khan, living here as a political prisoner. He often comes in and yams about his sporting trips. Taking it altogether, I shall feel a bit sorry when my time is up. The climate and scenery quite eclipse anything at home. There is little chance of getting specimens of crude B.P. drugs. In the bazaars there are only native simples to be had. We get everything from home except chiretta and S.V.R.

A Chemist of the Olden Days.

ACCORDING to that quaint, old-fashioned volume, "Thing Quaint and Curious," and other sources of information on matters of past centuries, the chemist of the olden days was an individual whose importance both from the point of view as a professional man and a member of society was on a par with the most exalted of his neighbours, men who held high official positions and discharged the duties of State. For instance, we read of one "Jermyn Dinercroft, an apothecary and compounder of drugs and herbs, with an extensive business and good-paying customers," who was sought out by Henry VII., and summoned before the royal presence "for the purpose of hearing the king's confidences respecting his peculiar and annoying ailments." The nature of these "peculiar and annoying ailments" is not specified, however, but further on the record states that "Dinercroft, who was learned in drugs and compounds, attended on h Majesty for several days, each time taking with him various bottles, jars, and phials." For such services as were rendered to the King the chemist received "liberal reward and many privileges." In the reign of Queen Elizabeth the drug-man was held in high respect by all classes, his power for good or evil being very widely recognised, and according to one historian "he eased pain and suffering, cured bad cases, and always brought sympathy and courage in his train."

Legal Reports.

High Court Cases.

MR. FENNINGS'S WILL.

MR. JUSTICE COZENS-HARDY had before him last week the case of *Bailey v. Beaven*, in which the executors of the late Mr. Alfred Fennings, West Cowes, manufacturer of proprietary medicines, sought directions from the Court as to the disposal of certain envelopes and their contents, left by the testator. Mr. Fennings, after providing for certain annuities and legacies, gave all the rights and property in his children's cooling-powders, lung-healers, and three other specified medicinal powders on trust to pay a number of annuities, and to pay the balance to his two sisters—who are both dead—for life, and after the death of the survivor to pay the balance in perpetuity to the treasurer for the time being of the National Refuge for Homeless and Destitute Children, Shaftesbury Avenue, upon certain conditions, including a condition that the children provided for by his bounty should not be trained for a seafaring life. He gave his property connected with two other medicines to his executors, subject to a life interest given to George Augustus Beaven, and the interest to pay the income to the treasurer of the same society, and gave his property connected with "Fennings's stomach-strengtheners" for the benefit of the same society, subject to certain life interests. He gave his residence to his two sisters; in consequence of their death it was undisposed of. The testator had directed 126 envelopes to various persons, some of them open, and some sealed; those that were open contained cheques in favour of the persons to whom the envelopes were addressed, those that were closed were supposed to contain cheques and bank-notes.

His Lordship declared that the contents of the open envelopes were part of the testator's estate, there having been no complete gift thereof. He said the executors were the proper persons to open the closed envelopes. He gave liberty to the executors to carry on the proprietary-medicine business.

GOODALL, BACKHOUSE & Co. v. SHAMROCK PROVISION COMPANY.

In the Chancery Division of the High Court of Justice on June 1, Mr. Justice Cozens-Hardy had before him a motion in an action brought by the plaintiffs to restrain the defendants from selling "Yorkshire Relish" which was not manufactured by the plaintiffs. Mr. Sebastian said he did not think there was likely to be any opposition, but asked that the action stand over until next sittings. His Lordship assented.

Workmen's Compensation Act.

At Warrington County Court on May 31, application was made by Messrs. Joseph Crosfield & Son (Limited), soap and glycerin manufacturers, for Judge James to review a case heard last August, in which 12s. 6d. a week compensation was awarded to an employé named Tanian, who lost the sight of an eye whilst engaged in the caustic department at the company's works. The Judge declined to set aside or to vary the award, pointing out that prior to the award Tanian was allowed 12s. 6d. per week.

Sale of Food and Drugs Act.

CAMPFORATED OIL AND SPIRIT OF NITRE.

At the Halifax West Riding Court, June 2, John Nicholl, grocer, Ripponden, summoned at the instance of Mr. Harold Hargreaves, Inspector under the Food and Drugs Act, for selling adulterated camphorated oil, was fined 20s. and 18s. costs. He stated that he purchased it from the wholesale-dealer as being the very best article obtainable.

At the same Court a summons was preferred against Walter Thorpe, grocer, Mellor Royd, Soyland, for selling adulterated spirit of nitre absolutely destitute of ethyl nitrite. An amusing item in the case was that defendant produced the wholesale dealer's label, which guaranteed

that the article was "absolutely pure." He could not proceed against the wholesale dealer for compensation, because he was in the Bankruptcy Court. Under the circumstances, the Bench imposed a lower penalty—namely, 10s., and 18s. costs.

Bankruptcy Report.

Re HARRY COGILL (trading as Harrington & Co.), 51 London Road, Southend-on-Sea, Mineral-water Manufacturer.

THE first meeting of creditors was held on May 23. The accounts filed by the debtor show liabilities 5,943l. 17s. 11d., and the assets, including stock-in-trade, 4,931l. 10s. 7d.; machinery, 933l. 14s. 9d.; book-debts, 939l. 19s. 9d., &c., amount to 7,273l. 10s. 7d., and show a surplus of 1,356l. 5s. 8d. The debtor began business in 1885 with 1,000l. capital, purchasing the mineral-water business from Mr. J. F. Harrington for 1,900l. in cash and bills. In November, 1895, he entered into partnership with Mr. T. O. Baldry for a period of ten years, but the partnership ended in October, 1899, the debtor to pay Mr. Baldry 1,500l. as his share in the capital and goodwill. The dissolution was not gazetted, nor the 1,500l. paid. The debtor recently tried to sell his business to a company, with a share-capital of 1,000l., but the attempt failed, and afterwards the debtor, when pressed by a large creditor, filed his petition. The Official Receiver having read over the proofs, objection was taken by creditors to Mr. Baldry's proof for 1,709l. being admitted for voting, and Mr. Baldry, on the advice of his solicitor, consented to withdraw the proof for voting. Mr. Cooper Willis, representing Mr. Charles Clarke, admitted creditor for 1,100l., asked for an adjournment for a reasonable time to enable his client to petition against Mr. Baldry as partner, and no doubt a receiving order would follow in due course.

After considerable discussion it was resolved that the meeting should stand adjourned until Tuesday, July 10, the Official Receiver to carry on the business in the meantime with the assistance of an advisory committee.

Gazette.

Partnerships Dissolved.

Howard, J., and Wilkins, W., mineral-water manufacturers and bottlers, Tipton, under the style of E. Marsh & Co.

Mavor, A., Mavor, F. J., and Mavor, F. F., veterinary surgeons and farriers, Park Street, Grosvenor Square, W., under the style of A. & F. Mavor.

Ogden, C., and Jameson, W. E., surgeons, Rochdale, under the style of Ogden & Jameson.

ADJUDICATION.

Ross, James, Liverpool, medical practitioner.

New Companies & Company News.

PETER JONES (LIMITED).—Capital 163,000l., in 17. shares. Objects: To acquire the business carried on at Chelsea by Peter Jones, and to carry on (*inter alia*) the business of chemical and drug merchants. The first directors are:—P. Jones (Chairman), F. Ford, S. H. Jones, and E. M. Jones. Remuneration, 600l. per annum, divisible.

BOWKER & HARROP (LIMITED).—Capital 20,000l., in 17. shares. Objects: To acquire the businesses carried on by E. A. Bowker, J. H. Bowker, and G. A. Bowker, and by S. Harrop, at Manchester, and to carry on the business of provision-merchants, oil and colourmen, chemists, druggists, &c. The first directors are:—E. A. Bowker, J. H. Bowker, G. A. Bowker, and S. Harrop. Qualification, 100l. Remuneration as fixed by the company.

TILLOTT'S DRUG-STORES (LIMITED).—Capital 500l., in 17. shares. Objects: To carry on the business of chemists, druggists, dealers in perfumery and proprietary articles, &c. The subscribers are:—W. J. Tillott, drug-stores manager; J. B. Tillott, chemist; F. T. Tillott, clerk; Mrs. S. A. Tillott; Miss A. Tillott; George A. Tillott, gentleman; and Miss N. J. Tillott, all of 55 Wood Street, Westminster. Registered without articles of association.

HANNAN'S CHEMICAL AND MINING COMPANY (LIMITED).—Capital 2,000l. in 17. shares. Objects: To carry on in Spain or elsewhere the business of miners, metallurgists, engineers,

chemical, soap, glycerin, and perfume manufacturers, &c. The subscribers are:—R. Lehmann, Moorside, Somerset Road, Ealing, merchant; C. T. Lehmann, Peninsular House, Monument Street, E.C., merchant; J. Pettijnerre, Peninsular House, Monument Street, E.C., clerk; Mrs. M. Lehmann, Moorside, Somerset Road, Ealing; Mrs. J. M. Lehmann, Maydore, Emmanuel Avenue, Acton, W.; Miss J. A. Lehmann, Moorside, Somerset Road, Ealing; and Miss S. Lehmann, Moorside, Somerset Road, Ealing. The first directors are:—R. Lehmann and C. T. Lehmann. (Qualification, 100%.)

TITAN SOAP (LIMITED).—At the first ordinary general meeting of this company held on May 23, at 54 Naylor Street, Liverpool, a dividend of 5½ per cent. on the preference and ordinary shares was declared.

COMPANIES WINDING-UP.—Kronthal Company (Limited): Petition presented May 25, by the British Medical Association, 429 Strand. Hearing, Royal Courts of Justice, Strand, June 13. Upton, Atkey & Co., 14 Austin Friars, E.C., sols—Celladema (Limited), Annette Road, Holloway: A first and final dividend of 2½d. is payable at the Official Receiver's, 33 Carey Street, any day except Saturday.

NEW PHARMACY COMPANY.—It is reported that the business of Mr. Lewis Wing, pharmaceutical chemist, of Weston-super-Mare, is being converted into a small company for the purpose of enabling his assistants to become part owners. The documents for constituting the company have been signed exclusively by qualified chemists—comprising Mr. Wing and some of his past and present assistants. The shares will not be issued for general subscription. A few are however, being reserved for customers, who may desire to participate in the concern. The business will continue precisely as before, under Mr. Wing's direct supervision.

HOMOCEA (LIMITED).—The report of the directors for the year ended March 31, to be submitted to the meeting to be held in London on 9th inst., shows that after payment of salaries and working expenses, provision for depreciation, advertisements, interest and other charges, there remains a balance of 5,182l. The directors recommend payment, at the rate of 6 per cent. per annum, on account of accrued dividend on the 6 per cent. preference shares up to March 31, 1898. Adjustment made of the vendors' interest has resulted in the forfeiture of 11,000 preference shares and 14,777 ordinary shares, and the cancellation of a large contingent liability, for a small consideration. The outstanding accounts for law costs in previous years amounting to 2,970l. were reduced by 1,335l., and the directors report that the various departments are now working harmoniously.

HILL, EVANS & CO. (LIMITED).—This well-known Worcester firm of vinegar-makers has been registered with a share-capital of 150,000l., and 80,000 5-per-cent. cumulative preference shares of 1l. each, and 83,000l. of mortgage 4½-per-cent. debenture stock are now offered for subscription. We gather from the prospectus that the business is being sold as a going concern for 230,000l., less 13,835l. 2s. 1d., which the vendors are to provide as working capital. Of the purchase-money 161,114l. 17s. 11d. is accounted for by freehold property, a private railway, plant, machinery, stock, and trade-debts. It appears, therefore, that the goodwill and trade-marks are valued at 55,000l. The average profits for the past three years have been 17,300l. per annum, or more than double what is required to pay the debenture-interest and the preference dividend. The ordinary shares, which will get part of any balance that may remain, are held by the vendors, and the new managing director is to be remunerated by such shares. We observe that Mr. Dyson Perrins (of Lea & Perrins, one of the customers of the firm) is to join the board of directors.

"TABLOID" CODEINE is now made by Messrs. Burroughs, Wellcome & Co. in ¼-gr. and ½-gr. sizes, put up in the usual neat manner.

INDIAN PASTEUR INSTITUTE.—The Government of India has sanctioned an annual grant of 9,500r. for the Central Committee of the Pasteur Institute from April 1.

SWEETMEATS FOR THE SOLDIERS.—Fifty tons of "candy" has been sent to the American soldiers in the Philippine Islands during the last three months. This is done because it is stated to be a physiological fact that in the tropics moderate consumption of confectionery promotes health.

Trade Notes.

MESSRS. DAY & SONS, of Crewe, following up our note of May 23 in regard to "Black Drink," inform us that they will take steps to restrain the unauthorised use of that title.

PARIS EXHIBITION GUIDE.—Following their pocket guide to Paris, Conty's pocket guide to the Paris Exhibition will be found a very valuable little addendum, containing 112 pages. Specially compiled for visitors to the Exhibition, it gives much u-eful information concerning the various sections, and the best way to visit and view them in three days. A map of Paris and one of the Exhibition are attached, and the descriptions in the body of the guide are lucid and well written. It is obtainable from M. A. Nion, 30 Geyard Street, London, W.

Marriages.

ADAMSON-WHYTE.—At Highfield, Dollar, on June 1, by the Rev. W. B. R. Wilson, Andrew G. Adamson, chemist and druggist, Kirkealdy, to Isabella, eldest daughter of the late Capt. Whyte, Dollar.

HANBURY-JANSON.—On June 6, 1850, at Stoke Newington, Cornelius, second son of Cornelius Hanbury, of Stoke Newington, and Bonechurch, Isle of Wight, and Elizabeth his wife, youngest daughter of John Sanderson, to Sarah Jane, only daughter of Frederic Janson and Sarah his wife, youngest daughter of John Tindall, of Knapton Hall, Yorkshire. [*Golden Wedding.* Mr. Cornelius Hanbury is Chairman of Messrs. Allen & Hanburys (Limited), London.]

PARK-STEPHENS.—On June 2, at Emmanuel Church, Plymouth, by the Rev. George B. Berry, M.A., Charles J. Park, pharmaceutical chemist, youngest son of the late Mr. George Park, fleet engineer R.N., to Maud, eldest daughter of Mr. T. R. Stephens, Moor View Terrace, Mutley.

SKINNER-GRIFFIN.—On May 10, at the Wesleyan Church Observatory, Cape Town, by the Rev. A. Hodges, Ernest Pape Skinner, chemist (of Messrs. Lennon, Limited), to Amelia, youngest daughter of the late Mr. George Griffin, of Boston, England.

Deaths.

BLOOMFIELD.—On May 31, at his residence, 144 The Parade, Leamington, Mr. Edwin James Bloomfield, chemist and druggist.

CLARK.—On June 3, at 57 Weston Park, Crouch End, of pneumonia, Charlotte, the wife of Mr. John Adolphus Clark, chemist and druggist and registered dentist, late of London Fields, Hackney.

JONES.—We briefly mentioned last week the death of Mr. Henry Stevens Jones, chemist and druggist, the dispenser at the Royal Naval Hospital, Haulbowline. He died on May 29. Aged 43. Mr. Jones was the son of Mr. Henry Stevens Jones, one of the founders of the Pharmaceutical Society, and a brother of Mr. Nathaniel S. Jones, chemist and druggist, Fulham Road, S.W. He was apprenticed at Fincham's, in Baker Street, and thereafter was one of the St. Bartholomew's Hospital dispensary staff. He passed the Minor in 1878, and then entered the Naval Hospital service, and did excellent work at Haulbowline.

Recent Wills.

PHILLIPS.—The will of the late Edward James Phillips, J.P., of "The Woodlands," Pontypool (formerly chemist and druggist of High Street, Newport, Mon.), who died on February 17 last, has been proved in the principal Registry by Mary G. Phillips, Henrietta L. Corbett, and Edward W. Phillips, the son and daughters respectively, who are also the executors. The gross value of the estate is 51,108l. 6s. 4d., and the net value of the personal estate 2,554l. 6s. 4d.

RICH.—The gross value of the estate of the late George Benjamin Orridge Rich, chemist and druggist, of 152 Mile End Road, E., has been sworn at 526l. 16s. 6d., including 488l. 9s. 2d. net personalty, by his widow and sole executrix, Mary C. Rich.

Correspondence

TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Anti-alcoholic Serum.

SIR,—In your report of the discussion on anti-alcoholic serum at the meeting of the Paris Academy of Medicine I read that Dr. Sapelier concludes that "the action of the serum is supposed to consist in a reawakening of the instinctive disgust of man for alcohol. The serum acts on the economy of the system, and excites the various organs to act against the injurious effects of alcohol, as well as on the circulation and nutrition." I cannot agree with this theory. As I have shown in my "Origin and Growth of the Healing Art," one of the strongest desires of human nature is the passion for some kind or another of alcoholic stimulants.

Intoxicating liquors are made by savages in primeval forests, and travellers in all parts of the world have found the natives conversant with the art of preparing some sort of stimulating liquor in the shape of beer, wine, or spirit.

Probably the art of preparing fermented drinks was in each native discovered by accident.

Berries soaked in water, set aside and forgotten, saccharin-roots steeped in water and juices preserved for future use have probably taught primitive man everywhere to manufacture stimulating beverages. I do not believe in "an instinctive disgust in man for alcohol"; the evidence is all the other way. No doubt the taste for spirits is an acquired one, but man having once found out that his home-made wine produced a certain amount of intoxication, would soon go on to acquire the taste for a more potent liquor, although the sweet flavour might be absent. We know that plant-worship is closely connected with intoxication. Herbert Spencer gives some of the expressions used in the "Rig-Veda" concerning fermented soma-juice. "This [soma] when drunk, stimulates my speech; this called forth the ardent thought." "The ruddy soma, generating hymns, with the powers of a poet." "We have drunk the soma, we have become immortal, we have entered into light, we have known the gods." If, therefore, there be any anti-alcoholic virtue in this new serum, which I do not for a moment believe, I cannot attribute it to the action suggested. Of course man, in common with the lower animals, at first acquired the taste for every article of food and drink except sweet berries, flesh, and water. The Laplanders, when herbage for their sheep cannot be obtained, feed the animals on fish. Cats and dogs are usually deeply offended by the offer of brandy or whisky, yet the repugnance, as your report tells us, has in the case of some animals been overcome.

Man, it would seem, can accustom himself to eat and drink almost anything, and there is no greater "instinctive disgust" for alcohol than for bitter herbs, sour fruits, or pungent berries.

We might as well talk of a serum to reawaken the dislike for tobacco, tea, or onions.

I am, Sir, yours &c.,
EDWARD BERDOE, M.R.C.S., L.R.C.P.E.

London, June 1.

Advertising Dentists.

SIR,—As you suggest in your Editorial on "Advertising Dentists," the question of whether a registered dentist is guilty of "infamous and disgraceful conduct" should he advertise is well worth a fight; and with this in view I am prepared to carry my case to the Court of Queen's Bench, if I have the moral and financial support of those dentists who advertise, who sooner or later will themselves be erased from the register unless this case is decided in my favour. I am instructed that the action of the General Medical Council in removing my name from the Dentists' Register is illegal,

and that I can claim heavy damages from them. Well, we shall see. Against the advice of their own journals, their best friends, and counsel—who have declared time and again that advertising by registered dentists cannot be construed into "infamous conduct"—they have erased my name from the register, with a view, no doubt, to test how far Section 13 of the Dentists Act can be stretched. Now, therefore, is the time for all who are interested to combine. Dr. Hugh Woods stated, before the Dental Committee on February 27, that not only did his Association want a definite pronouncement from the General Medical Council that registered dentists would not be allowed to advertise in the future, but that should such dentists also be chemists, no loophole should thus be afforded them; in fact, that whatever else a registered dentist might be, he must be prohibited from advertising in any form. After my case was decided by the General Medical Council, a discussion took place on dentists' advertising, and the Council were divided—some were for non-tolerance of any advertising whatever, but to these it was pointed out that unobjectionable advertisements (whatever that may mean) could not be said to constitute "infamous conduct," and that the Council were not prepared to forbid a certain kind of advertising. Who is to judge what is objectionable and what is not? It was owing to the card, which I considered so unobjectionable as to submit it to the Council voluntarily, that my name was erased. I beg to thank all those who have written sympathising with me, and also you, Sir, for your pointed and rational remarks on the subject. In this case, as in others, the chemists and druggists of the country should note well that when their interests are attacked THE CHEMIST AND DRUGGIST can always be relied upon to point out the danger at once. I ask those who are interested to send an early intimation as to how much each one is prepared to guarantee to fight the General Medical Council, and thus have the case threshed out in the Law Courts.

Yours faithfully,

Barnsley, June 5.

ARTHUR OGLESBY.

SIR,—I have read the report, and your comment on the action of the General Medical Council in striking off the dental register the name of a chemist and dentist at Barnsley for advertising, bringing such under the category of infamous conduct. I do not think this action should be left unchallenged, or doubtless the names of many chemists who are registered dentists, and carry on a dental practice in conjunction with pharmacy, will be expunged from the dental register if this decision is not reversed. Possibly later on the Medical Council might be led to extend their ideas of unprofessional conduct even to the extent of condemning those who advertised themselves on labels and handbills as chemists and dentists. I do not think the unfortunate chemist at Barnsley, should be called upon to bear the costs of appealing to the Court of Queen's Bench on a point which concerns almost every chemist and dentist, and since this is quite a different question to that for which the dental fund was instituted some few years back, I would suggest, or rather ask, that you should on this occasion again offer your good services for collecting a fund to contest the validity of the action of the Medical Council. Please put my name down for a guinea towards such object.

Yours truly,

CHEMIST AND DENTIST. (100/8)

[We understand that Mr. Oglesby is quite prepared to go on with his dental business without the appeal suggested, but, in consequence of representations by several dentists who advertise, he is willing to appeal. We think he should have backing from, at least, fifty in a similar position, and that it should be prompt. There should be no mistake about the fact that a principle is involved—a principle to which Mr. Oglesby is merely incidental. We shall, of course, subscribe.—EDITOR.]

Deaths by Chloroform and other Poisons.

SIR,—It is strange but true that whilst coroners are rightly anxious that a law should be made for regulating the sale of poisons for preventing persons from destroying their own life by that easy mode of death, not even a thought is given to the absolute necessity of making a law for preventing ignorant persons continuing to destroy the life of men, women, and children unwilling to die by making them inhale and absorb more than double the quantity of chloroform that is necessary for surgical anaesthesia. Here are

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

75/40. *Yank*.—(1) Peroxide of hydrogen is used for moving the stains on wood due to "bleeding." Varnish subsequently applied is not injuriously affected. (2) It is not advisable to use pills containing pil. hydrargyri too freely. pill on the model of the little antibilious pill given in *Pharmaceutical Formulas*, page 576, would be more suited for constant use.

79/44. *Veteran*.—**Metal-paste**.—Modern pastes are made with kieselguhr and heavy petroleum oil. The following is a good formula of this class:—

Paraffin wax	3ij.
Heavy paraffin oil	3vj.
Crude oleic acid	3iv.
Kieselguhr or precipitated silica ...	3viij.

Mix.

83/30. *Opium*.—(1) **Blood-purifier**:—

Potass. bicarb.	3ss.
Potass. chloratis	3ij.
Ext. sarsae liq.	3iiss.
Ext. cascara sag.	3ss.
Aq. chlorof. ad	Qj.

3ss. ter in die ex aquâ.

83/30. *Eczema-ointment*:—

Emp. diachyli... ..	3ij.
Ung. zinci	3ij.
Lanolini	3ij.
Vaselini alb.	3ij.
Ol. geranii	℥xx.

Melt the plaster and mix with the other ingredients in a warm mortar to a perfectly smooth paste.

83/30. *Starch-gloss Powder*:—

French chalk	3iij.
Powdered white soap	3j.

Mix.

A little of the powder is rubbed over the starched article previous to ironing it.

83/30. *Nerve-and-Liver Tonic*:—

Tr. gentiane	3ij.
Tr. aurantii	3ij.
Succ. taraxaci... ..	3iiss.
Aq. nit. mur. dil.	3iij.
Aq. chloroformi ad	Qj.

3ss. bis vel ter in die ex aquâ.

76/82. *Unolia*.—The Royal School of Mines does not grant certificates in assaying except to its own students. The examinations in metallurgy of the Science and Art Department are held annually in May. Chemists and druggists who have an intimate knowledge of assaying generally do well near gold-fields if they are enterprising enough to push both departments.

71/53. *Coltonopolis*.—Fullers' Earth can be lightened in colour by percolating with hydrochloric acid to dissolve out iron. "White fullers' earth" is kaolin.

76/31. *Sigma*.—(1) **Magnification of a Microscope**.—An approximate method of arriving at this is to divide the distance of distinct vision by the focus of the objective. Thus, for a microscope with a 10-inch tube-length and a 1-inch objective, the magnification would be 40 diameters. The exact method involving the use of the Wollaston camera lucida and micrometer is explained in most text-books on the microscope. (2) You will be able to judge, from the particulars given in the "Students' Corner," *C. & D.*, April 21, page 655, whether the microscope you mention is of good value. Pritchard's microscope, in which the objective was made from a diamond is one of the curiosities in microscopes of the present century.

76/64. *Bricks*.—**To Make Drying-oil**.—The quickest way of doing this is by the modern method of dissolving resinates or linoleates of metallic oxides in linseed oil. According to the 1899 edition of *Merck's Report*, it requires 1 to 3 per cent. of the manganese preparations or 2 to 5 per cent. of the lead preparations.

70/85. *Wills*.—**Blood-manure**.—We outlined the processes for preparing this in the *C. & D.*, December 24, 1898, page 1027.

93/37. *Nemo*.—The table-salt contains calcium phosphate

92/82. *J. D. S.*—The liniment to which you refer is simply oil of betula alba, commonly called oil of winter-green.

94/21. *L. M.*—**Liver-mixture**, "*Pharmaceutical Formulas*," page 557.—There is no red colour which will survive combination with this mixture owing to the bleaching effect of the nitro-hydrochloric acid. Better try a brown colour—dec. aloes co. conc. or sacch. ust. If that does not suit you omit the nitro-muriatic acid, and put $\frac{1}{2}$ dr. of potassium nitrate in its place, colouring with cochineal. The dose should be one tablespoonful. For general use $\frac{1}{2}$ dr. of tincture of podophyllin will suffice.

83/74. *Swin*.—**Cyclists' Embrocation**.—A good formula for this was given in the *C. & D.*, December 2, 1899, page 924.

83/45. *G. H. G.*—**Peptonised Cocoa** is understood to be pure soluble cocoa mixed with a small proportion of pancreatin and sodium bicarbonate. The preparation of such a cocoa is, however, the subject of a patent.

97/4. *T. H. R.* had an inquiry for a pennyworth of "Eps salts, log salts, and sagnia," and he asks what we should have given for these? We should not have hesitated in supplying Epsom salts, Rochelle salts, and senna.

97/41. *Dispenser*.—You will find a list of books for the Minor in our last Educational number, September 2, 1899. The Secretary of the Public and Poor-law Dispensers' Association is Mr. G. F. Forster, Shuttleworth Club, Fye Foot Lane, Queen Victoria Street, London, E.C.

76/33. *Victory*.—The **Tie and Toothache Powder** is a mixture of antifebrin and powdered gentian. There is nearly 6 gr. of antifebrin in each powder.

73/45. *C. W.*—The pills you send, which have performed such wonders in a case of lumbago, are Blaud's iron pills.

75/26. *Verax*.—The **Headache-powder** is, as you suspect, acetanilidum.

77/23. *Navy Cut*.—The **Starch-glazing Powder** is a mixture of powdered soap (1) and powdered prepared chalk (3).

85/29. *Acidity*.—You will find a formula for an indigestion-mixture in the *C. & D.*, May 26, page 904.

92/48. *Zeta*.—**Tartaric Acid to Answer the B.P. Test** costs quite the sum you mention. The test is wrong, not the manufacturers of the acid. Read *THE CHEMISTS' AND DRUGGISTS' DIARY*, 1899, on this subject. The matter was fully discussed in the *C. & D.* two years ago.

95/8. *W. G. G.*—A **Hair-dye** weaker in pyrogallol than the one given in the *C. & D.*, May 19, page 834, will yield a brown colour when used on the hair.

95/1. *Methyl*.—A **Wall-paper Cleaner** which we examined last season appeared to be bread-dough tinted red, and containing a large proportion of glycerin of borax.

94/33. *Ants*.—**Ants Succumb**, as a rule, to an aqueous solution of aloes in camphor-water, but in cases where that remedy is not effectual, recourse may be had to benzin, which is particularly abhorrent to ants.

94/13. *H. A.*—The sample of **Ointment** you send is a roughly-made carbolic ointment made with lard, and coloured with pink prepared chalk.

81/18. *Second Reader*.—We are afraid we cannot satisfy your youngest apprentice's curiosity, as the enclosure you say you sent with your letter did not reach us.

65/5. *II. B.*—**Colouring Canaries**.—It is merely a pretty conceit of the paper you name to call aniline dyes by their chemical names: it probably impresses its readers. The hydrochloride of penta- or hexa-methyl-para-rosaniline is the chief constituent of methyl violet B, and the alkali salt of tetra-bromofluoresceine is water-soluble eosine. The usual way of employing these dyes for tinting canaries is to add enough of an aqueous solution to the bird's drinking-water to give a fairly pronounced colour to the water. The two dyes, methyl-violet and eosine, are not poisonous except in very large doses.

92 39. *Seccotine*.—Bernthsen's "Organic Chemistry," 7s. 6d. (Blackie) is a good book for Major chemistry. We may tell you, however, that there is no book which gives "just the necessary amount" of organic chemistry for the Major. There was a full list of books for Major students in the *C. & D.* Educational Number, September 2, 1899, page 403.

90,62. *F. W.*—Kieselguhr is a good base for Carbolie Tooth-powder, but rather too light in bulk. If mixed with kaolin the bulkiness is suitably diminished. "Dimatos" is an Australian kieselguhr of excellent quality, sold by Messrs. Southall, Birmingham. When you speak of kieselguhr having an objectionable colour, and being gritty, you cannot be aware that it is obtainable in every quality, from pure white with a silky feel up to the dark grey and coarse varieties used for making dynamite.

Information Supplied.

Dust in the Eye.

An experiment I made the other evening in taking a speck of dust out of one of my eyes was so successful that I send you particulars, in the hope that they may be useful to chemists, who are often applied to to do this minor operation. The particle entered by eye on my way home, and was causing a good deal of pain. Finding none of the usual means at hand by which to get rid of the offender, I thought of trying a thread of worsted folded to form a bow. I raised the eyelid, inserted the bow, let the lid fall, then drew out the bow, and was successful in bringing out the trespasser at the first attempt, adhering to the thread.

W. C. (254/10.)

Measuring Sacch. Ust.

253 15. *W. P.* (Bridlington Quay) finds if sacch. ust. is measured in a graduate which has just been used for

glycerin, it can be poured from the measure without leaving any behind. This is a useful tip when making up cough-mixtures or chlorodynes containing both glycerin and sacch. ust.

Amateur Prescription-writing.

Messrs. Taylor & Wiseman, of Weymouth, send us a rather curious prescription, apparently the attempt of an amateur at copying. It actually reads as follows:—

H 48 5 Cirlee... .. 8ss.

82 pil. iwtte xxiv.

One three times daily.

Few will have trouble in recognising what is intended.

Casareep.

In your issue of March 17 a correspondent inquires where casareep may be obtained. I have to inform you that it may be obtained here. It is used as a medicine, also as the base of many sauces. I am told it is largely used in the manufacture of Worcester sauce. Should your subscriber require any quantity I shall be pleased to give any further information.

Pernambuco, April 9.

C. SINDEN.

Non-charring Wicks.

S. C. (87/11) says that if ordinary wick is dipped in a strong solution of tungstate of soda charring is prevented.

Carbon-paper.

G. M. (92/19) writes that it is not possible by hand-work to compete with machine-made carbon-paper if it is required in quantity. This is by way of warning to the correspondent to whom we replied in the *C. & D.*, May 26, page 905.

Acide Sulphonitrique Dilue Rabelais.

94/58. *Mons. E. A. Barber* (Pau), supplies the following formula in answer to 68 67 (*C. & D.*, May 19):—

Pure nitric acid	...	...	...	2 parts,
Pure sulphuric acid	...	...	...	4 "

Weigh separately, and mix drop by drop in a capsule placed on ice.

For the dilute solution mix 6 parts of the resulting acid with 300 parts of distilled water.

The latest Cure for Varicose Veins came under my notice the other day. A man came in my shop for Kay's coaguline, and in the course of conversation explained that he used the coaguline for smearing, when warm over the veins, and he said, when this "set," it proved the most effectual thing as a support: better than bandages or elastic stockings. 45, 67.



AN AMERICAN VIEW OF LITTLE WILLIE'S APPLICATION OF MA'S HAIR-RESTORER, AND THE EFFECT IT HAD ON BABY.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: June 7.

BUSINESS this week was practically suspended until Wednesday, owing to the Bank-holiday and Pretoria-day; price-alterations are, therefore, few and unimportant. The omission of the fortnightly drug-sales has also proved a great obstacle to business, buyers complaining that they have orders in hand for goods which, in the first instance, must be offered by public auction. In crude drugs Sumatra and Palembang benzoin meet with a fair demand. Colocynth has again been sold cheaply, but values are likely to be higher shortly. The demand for ipecacuanha has fallen away entirely; the deliveries during May, however, of both Rio and Cartagena-root amounted to 162 bales, which is considered almost a record for any one month. Quinine has been quiet pending the Amsterdam cinchona-auction, the result of which is given on page 980. The following are the chief alterations of the week:—

Higher	Firmer	Easier	Lower
Cinchona Oil, lemon	Fenugreek Gentian	Canary-seed Oil, linseed Oil, orange Pot. chlor.	Menthol (c.i.f.) Oil, palm Oil, turpentine

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom, from May 31 to June 7, both inclusive:—Aloes (Cape), 104; argols, 40; arrowroot (St. V.), 2,312; balsams, 10; benzoin, 160; boric acid, 163; camphor oil, 500; cannabis indica, 8; cardamoms, 59; cinchona (Ceylon), 131; cod-liver oil, 50; colocynth, 3; dragon's blood, 8; eucalyptus oil, 80; fennel-seed, 668; ginger (Jam.), 278; gum arabic, (Egyptian) 80, (from Trieste) 45; honey, (Aust.) 9, (Jamaica) 7, (Calif.) 26, (Chil.) 385; insect-powder, 40; lime-juice (W.I.), 94; lime-oil, 3; liquorice-root, 20; olibanum, 105; opium, 57; quillaia, 1,005; rose-oil, 5; sarsaparilla, 14; turmeric (Bombay), 237; vanilla, 25; wax, bees' (Jam.) 1, (unenumerated) 164, (Fr.) 90, (Morocco), 26; wax (Japanese), 206.

Bulgarian Rose-crop.

Kezanlik, June 2.

The distillation has already begun throughout the entire rose-districts. From the reports which have been received from all the principal villages the rosebuds are abundant everywhere this year, and the weather is cool and rainy. Under these conditions a large crop is expected, and in view of this abundance it is not thought that adulteration will be practised in the villages during the distillation, so that the quality of this year's otto is likely to be of the best.

Heavy Chemicals.

[These prices are for market-centres other than London.]

On account of the holidays business in the heavy-chemical market has been very quiet since last writing, but the general tone of the market remains very much as lately reported, and there are no important changes to be noted. Values all round are very steady.

ALKALI-PRODUCE.—Caustic soda and bleaching-powder are both in strong request, and the former is somewhat scarce. Prices firm, with tendency towards advance. Soda-crystals and ammonia alkali are also moving freely. Saltcake quiet and a shade lower. Chlorates dull, and offering at slightly lower figures.

BARIIUM-PRODUCTS all round maintain a very firm tone, and

generally are in good consumptive demand. Present values are about as under, but higher figures are not unlikely to rule at an early date. Chloride of barium, best ordinary refined crystals, 7*l.* 5*s.* to 7*l.* 10*s.* per ton, free on rails, and 7*l.* 7*s.* 6*d.* to 7*l.* 15*s.* per ton, free on board. In ordinary bags, 5*s.* per ton lower. Blanc fixe (pure precipitated sulphate of barium in paste form) very scarce, and firm at 7*l.* 5*s.* to 7*l.* 15*s.* per ton, free on rails in 8 to 9 cwt. casks. Sulphide of barium is moving steadily at 5*l.* 5*s.* to 5*l.* 15*s.* per ton, ex stock in barrels. Mineral carbonate of barium (withelite) is still practically unobtainable. For any second-hand parcels offering high prices are being asked. The precipitated carbonate of barium is also in heavy request, but so far remains unchanged in price. Hydrate of barium, purest crystals, continue to move freely, and are steady at 12*l.* to 13*l.* per ton in usual casks, ex stock, according to quantity. Mineral sulphate of barium, ground, 40*s.* to 90*s.* per ton in bags, according to quality and quantity.

BROWN ACETATE OF LIME remains unchanged, and is steady at 6*l.* 15*s.* to 7*l.* per ton.

BICHROMATES OF POTASH AND SODA tend lower. Present figures are about 4*l.* and 3½*l.* per lb., less 5 per cent. respectively Glasgow, although a shade less would doubtless be accepted for good orders.

ALUMINA-PRODUCTS continue to move steadily, and prices generally are well maintained. Crystal alum unchanged, loose lump, 4*l.* 15*s.* to 5*l.* per ton; lump, in tilters, 5*l.* to 5*l.* 2*s.* 6*d.* per ton; and ground, in bags, 5*l.* 7*s.* 6*d.* to 5*l.* 12*s.* 6*d.* per ton. Best makes of pure white sulphate of alumina, practically free of iron, remain firm at 85*s.* to 95*s.* per ton, in casks, on rails with customary allowances for bags or loose slabs. Alumino ferric, 42*s.* 6*d.* to 47*s.* 6*d.* per ton. Sewage alum, 45*s.* to 47*s.* 6*d.* per ton. Aluminous cake, 50*s.* to 55*s.* per ton. Hydrate of alumina of purest quality and highest percentage, 11*l.* 5*s.* to 12*l.* per ton, in 10 to 12 cwt. casks. Bauxite 60-per-cent. alumina, 17*s.* to 18*s.* 6*d.* per ton, f.o.b. Chloride of aluminium solution, 11*l.* 10*s.* to 12*l.* 10*s.* per ton, free on rails in barrels. Aluminate of soda, highest percentage, Al₂O₃, 37*s.* 6*d.* to 40*s.* per cwt., according to quantity. Carbonate of alumina, 35*s.* to 37*s.* 6*d.* per cwt.

Liverpool Drug Market.

Liverpool, June 6.

In consequence of the Whitsuntide holidays business, generally speaking, has only been of a nominal character.

CASTOR OIL.—Firmness characterises the market. Nineteen hundred cases have arrived by the s.s. *Logician*, but holders show no disposition to meet buyers, as all the parcels on board are particularly well held; 3½*d.* per lb. is the price for good Calcutta seconds, and quotations for forward delivery point to a higher range of values. First-pressing French and English ditto is firm at 3½*d.* to 3¾*d.* per lb.

HONEY.—Some fine partly set partly liquid Californian has changed hands at 44*s.* per cwt., but for finer grades 47*s.* is asked. Chilian: The new crop continues to arrive in small parcels, but there is no quotable change in values.

BEESWAX.—A sale of good greyish Chilian is reported at 7*l.* 7*s.* 6*d.* per cwt., but the only parcels now available are held at prices ranging from 7*l.* 12*s.* 6*d.* to 8*l.* per cwt. Five bags of Sierra Leone offered at auction, and 6*l.* 10*s.* was bid. The lot was withdrawn and afterwards sold on private terms.

QUILLAIA-BARK.—A large arrival is reported, and holders may become easier in their views.

GINGER, AFRICAN.—Large sales for America are spoken of, and there is a good demand on the spot for the limited supplies available. Values range from 24*s.* 6*d.* to 28*s.* per cwt., according to quality. With a continuance of hot weather holders say the value is sure to rise.

CANARY-SEED.—The market continues flat at 34*s.* to 34*s.* 6*d.* per quarter.

GUM ACACIA SORTS.—The only fresh feature for the week has been the arrival of a parcel of Ghezreh, a grade which has been conspicuous by its absence for some time.

KOLA-NUTS.—Several parcels of fair quality dry West Coast Africa offered at auction. There were no bids. Holders' ideas were 2*d.* per lb. For a parcel of fresh kolas 1*s.* was asked, though the holder intimated that if 6*d.* were bid the business would not be difficult.

COD-LIVER OIL.—The only available parcels of Newfoundland on this market have been cleared during the week, but the price was not allowed to transpire.

German Drug Market.

Hamburg, June 5.

Our drug-market is very quiet at present, and owing to the Whitsuntide holidays very little business is doing just now.

ANTIMONY is tending firmer; Chinese, at 36½*m.*, and Japanese, at 40*m.* per 100 kilos.

CAMPHOR (REFINED) is very firm, but unchanged; second-hand holders ask 485*m.* per 100 kilos.

CODURANGO shows a firm position at 195*m.* per 100 kilos.

CHLORATE OF POTASH is firmly held, at 76m. per 100 kilos. for crystals.

COCA-LEAVES are firm, Bolivian being quoted at 325m. per 100 kilos.

ERGOT OF RYE is very dull and without orders from America; spot is 310m. to 305m. per 100 kilos.

IPECACUANHA is steady; Rio at 27m., and Cartagena at 19m. per kilo; 20 packages have just arrived here.

LYCOPodium is unchanged, but steady at 485m. per 100 kilos.

QUININE neglected, at 43m. per kilo. from second-hands.

COCAINE shows a better feeling, owing to larger purchases of crude by the manufacturers; up to 395m. per kilo. having been paid.

GRAINS OF PARADISE.—A further supply of 26 bags has come to hand, in consequence of which the price has been reduced to 160m. per 100 kilos.

BALSAM PERU.—The present low prices have resulted in more buyers coming forward, so that the position is somewhat firmer. There are large stocks in first-hands, however, which prevent any decided advance; 12½m. per kilo. is quoted.

WAX (JAPANESE) is firmer at 53m. per 100 kilos.

WORMSEED is also firmer at 57m. to 60m. per 100 kilos.

OILS.—Cod-liver is very quiet at 75m. per barrel. Linseed and cotton-seed oils are easier. Essential oils show very few changes. Anise oil (Russian) is 13½m. per kilo. Caraway is tending upwards, and a further advance in prices is expected in consequence of the advance in seed. To-day's quotation for rect. 0-910 oil is 11½m. per kilo.

Cablegrams.

AMSTERDAM, June 7, 3.27 P.M.:—The auctions of cinchona-bark held here to-day consisted of 4,984 packages (6,855 in May) weighing 416,709 kilos, and containing 18,082 kilos. (632,870 oz.) quinine sulphate. The manufacturing bark contained an average percentage of 4.92 per cent., against 5.36 per cent. for the auctions in May last, and an average of 5.38 per cent. for the ten auctions of 1899. Of the above-mentioned quantity 4,849 packages were disposed of at an average unit of 10.35c. per half-kilo., against 10.10c. paid at the May auctions. The following were the approximate quantities of bark purchased by the principal buyers:—English and American factories, which purchased the equivalent of 6,978 kilos. quinine sulphate; Brunswick factory, 3,052 kilos.; the Mannheim and Amsterdam factories, 2,796 kilos.; the Frankfurt-on-Maine and Stuttgart factories, 2,804 kilos.; and various buyers, 2,051 kilos. The prices paid for the manufacturing ranged from 12¼c. to 87c. per half-kilo., and for druggists', from 18c. to 82¼c. per half-kilo. The tone of the auctions was steady.

* * * *

BERGEN, June 7, 11.20 A.M.:—The weather at Finmarken during the past week has been stormy, but the catch, nevertheless, is considered fair. Up to date 32,460,000 fish have been caught, against 30,521,000 at the corresponding period of 1898. The yield of this quantity is estimated at 25,500 barrels of crude oil, against 27,900 barrels last year. The market still remains quiet at 72s. per barrel, f.o.b. Bergen, for best medicinal oil.

* * * *

NEW YORK, June 7, 2.50 P.M.:—The market here is quiet, several articles having a downward tendency. Rio ipecacuanha is slightly easier at \$3 per lb. Senega is lower at 38c. per lb., so is serpentry-root at 28c. Damiana leaves are also cheaper, there being sellers at 7½c., and golden seal (hydrastis) has been reduced to 52c. per lb. On the other hand jalap is scarce at 11c. per lb., and buchu-leaves have a firmer tendency, 12c. now being asked for round green. Opium has advanced to \$3.12.

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HAMBURG, June 7, 2.5 P.M.:—Agar-agar is firmer at 370m. per 100 kilos., and oil of turpentine is easier at 84m. Refined camphor is firm at 480m. per 100 kilos.

London Markets.

ACID, CARBOLIC.—Very quiet. Crystals, 39° to 40° C. are quoted 10¾d.; 34° to 35° C., 9¾d. to 10¼d. per lb. Cresylic, 95 per cent., 1s. 4d. to 1s. 6d. per gal. Crude, 60 per cent., is 2s. 7d. to 2s. 8d., and 75 per cent. 3s. to 3s. 1½d.

ALOES moves off very slowly. Twenty cases of hepatic Zanzibar in tins have arrived this week, and about a fort-

night ago 60 cases of the East African description were landed, but there is no demand at the moment.

BENZOLIN.—A fair inquiry continues for Sumatra seconds, buyers paying from 7l. to 7l. 10s. for the marks offered in auction; supplies of this grade are now getting small. Siam has been in request, but the stock is exceptionally low and prices are rarely allowed to transpire. For good bold almonds 15l. has been paid and 7l. to 7l. 10s. for bean and pea size. Dusty Siam siftings are much wanted and much higher prices would be paid. Palembang in tins sells quietly, 55s. having been paid for fair in tins (an advance of 1s. 6d. to 2s. on the auction prices). Good block is almost exhausted in first hands. The *Promethus* from Singapore brings 160 packages this week, which ought to relieve the apparent scarcity of certain grades.

BUCHU.—There are one or two buyers in the market, but their ideas of value are below those of holders. Still 5½d. to 6½d. per lb. has been paid for fair leaf.

CAMPHOR.—Japanese crude has been sold at a shade below 182s. 6d. per cwt., c.i.f.; on the spot 190s. is asked, but business altogether is quiet.

CANNABIS INDICA.—Small sales of tops have been made at about 1s. per lb.

CASCARA SAGRADA is neglected, with sellers of new bark at 21s. per cwt., c.i.f. On the spot 25s. is wanted in one quarter, and 32s. 6d. for old bark.

CHAMOMILES.—In one quarter 100s. per cwt. is named as the spot price.

CINCHONA.—The Nederlandsche Veem cinchona-bark department at Amsterdam reports that the shipments from Java to Europe during May amounted to 816,000 Amsterdam lbs., and for the five months of this year to 3,252,000 Amsterdam lbs. The following are the corresponding figures for previous years:—

—	1899	1898	1897	1896	1895
Amsterdam lbs.					
February ..	943,000	672,000	600,000	768,000	402,700
January to May ..	3,252,000	3,964,800	3,884,000	2,510,000	3,260,000

The exports from Ceylon for the week ending May 14 were 17,750 lbs. So far this year they have been 159,611 lbs. against 288,381 lbs. at the same time in 1899. The stock in Amsterdam has been reduced to 9,150 packages, as against, 11,330 at the same time last year.

COCOA-BUTTER.—The tone at the Amsterdam auctions on Tuesday was quiet. Ninety tons of Van Houten's sold at 80s. to 82c., the average price being 80.95s.; 7½ tons Helm brand offered, of which 6½ tons sold at 80c.; 4 tons De Jong and 2 tons Holland sold at 79c. per half-kilo.

COLOCYNTH.—Further sales of Turkey apple have been made this week at 1s. 3d. per lb., but quality was not fine; 1s. 6d. would be paid for prime whole apple. The stock in Trieste has been exhausted for some time, and reports concerning the new crop point to a scarcity.

CREAM OF TARTAR is quiet but firm, and although the price keeps advancing in Bordeaux, this market does not respond. B.P. powder (98 per cent.) is quoted 8s. to 8½s. per cwt. according to holder.

DRAGON'S-BLOOD.—Six cases of good reboiled lump have arrived this week.

GENTIAN is firmer, new crop having sold at 17s. per cwt., c.i.f., for July-August shipment. On the spot one holder asks 16s. 9d.

GUAIACUM.—At the next drug-auctions another parcel of fine loose drop and good block will be offered, of which four or five cases have arrived.

IPECACUANHA.—During the past fortnight the market has been very quiet, and prices are unchanged. The deliveries during May consisted of 93 bales Rio and 112 Cartagena, which figures slightly differ from those given in the statistics. About ½ ton of Cartagena root has arrived from the United States this week, having been rejected by Customs authorities owing to its stemmy character.

JALAP.—Continues firm, holders still talking it up. For good sound tuber $6\frac{3}{4}$ d. per lb. has been paid, but it would be difficult to find more at this figure; most holders are asking $7\frac{1}{2}$ d.

KINO.—There is a small inquiry for Cochin grain, and sales have been made at 1s. 3d. per lb., which is an advance on the last price paid.

LYCOPodium.—There is a little to be had at 2s. 4d. per lb. spot, but supplies are well concentrated.

MENTHOL.—Inactive at 7s. 9d. to 8s. per lb., spot; the latter figure for single-case lots. To arrive, 6s. 9d., c.i.f., is asked, which is decidedly lower.

OIL, ANISE, STAR.—Quiet, but steady, at 5s. 10d. to 6s. 10 $\frac{1}{2}$ d. per lb. on the spot.

The exports from Wuchow in 1899 were 28,267 lbs. (7,179l.), as compared with 38,400 lbs. (8,229l.) in 1898.

OIL, CARAWAY. is very firm but unchanged, at 6s. 3d. per lb. for B.P. quality.

OIL, COD-LIVER.—Quiet and unchanged.

BERGEN, June 2.—The market is quiet but fairly firm, and there is probably no chance of a lower quotation for Lofoten oil than the present quotation of 72s. per barrel, f.o.b. There is nothing new to be said regarding the fisheries at Finnmarken, except that the quantity is gradually increasing in spite of the stormy weather. The exports to date from Bergen were 3,412 barrels, against 4,978 barrels at the same time last year.

OIL, LEMON, is still rising, 3s. 5d. per lb., c.i.f., being an inside quotation for genuine oil. On Thursday 4s. was asked by one agent.

OIL, ORANGE, is easier this week, there being sellers at 6d. per lb., c.i.f. Bitter is 7s. 6d.

OILS, FIXED.—Linseed is 34s. per cwt. in pipes, and 33l. in barrels. Rape unchanged at 31s. for refined; rapeseed, 29s. Cotton steady at 23s. 9d. to 24s. 9d. for refined in ordinary casks. Coconut, Ceylon, spot 25s. and Cochin 26s. Palm, fine Lagos, is again 6d. lower, now 26s. per cwt.

OPIMUM.—Persian is the only kind which has been inquired for this week, 13s. 6d. per lb. having been paid for fine. Ruggists' and soft-shipping are unchanged.

SMYRNA, May 25.—The market has been quiet this week, with a few sales of current talequale 1899 crop at from 8s. 6d. to 8s. 9d. per lb. as to quality. To-day about 10 cases of extra-selected arabissar, free of seconds, have also been sold at 9s. Buyers very day find it more difficult to procure stuff, as very little stock remains in the hands of small holders. Largely-interested dealers continue to be very tenacious, and will not sell anything under 9d. to 9s. 4d. as to quality. In a day or two we expect to see a few crop opium on our market from the low-lying districts. The estimate of the new crop is officially stated at about 7,500 cases, but there are many who think we shall see the out-turn exceed 8,500 cases, including the Salonica and Malatia crop.

POTASH SALTS.—Continental manufacturers have advanced their quotations for caustic by 2m. per 100 kilos, owing to scarcity, and a still further advance is expected. On this market 88 to 90 per cent. is quoted 26l. 15s. per ton, and 74 to 76 per cent. 25l. Carbonate, 90 to 92 per cent., is 22l. 5s., and 92 to 98 per cent., 24l. per ton. Chlorate has been neglected, the f.o.b. quotation in Liverpool being $4\frac{1}{2}$ d. to $4\frac{3}{4}$ d. per lb. in ton lots. English yellow prussiate is quoted 8d., and blackton $7\frac{1}{2}$ d. Permanganate 47s. 6d. to 48s. per cwt. for all crystals. British refined saltpetre is 21s. per cwt. for barrels, and 22s. for kegs; German, 19s. 6d. and 20s. 6d. respectively. In cyanide a good business has been done at from 1s. 0 $\frac{1}{2}$ d. to 1s. 1d. per lb. for 98 per cent. in contract lots. Makers are said to be chary at booking contracts at present prices.

QUININE.—Prices have been more or less nominal this week in the absence of business, and not until the result of the Amsterdam cinchona auctions is there likely to be any movement. On Wednesday there were sellers on the spot at $\frac{3}{4}$ d. per oz., and 1s. 3 $\frac{3}{4}$ d. for August, and 1s. 4d. for October delivery. To-day there has been more inquiry, $\frac{3}{4}$ d. having been paid for spot, and further sellers at $\frac{3}{4}$ d. per oz.

ROSIN is easier, strained on the spot being quoted 4s. 9d. per cwt. ex wharf.

SARSAPARILLA.—Jamaica remains very scarce, the last three steamers from South America bringing no supplies. For sound 1s. 7d. to 1s. 8d. is wanted, and for Lima-Jamaica 1s. 1d.

SEEDS.—There is little alteration in values to note. *Cumin*, being in small supply, realises good prices; Morocco 32s., and Malta 33s. 6d. per cwt. *Fenugreek* is firmer at 6s. 3d. to 6s. 6d. per cwt., there being little disposition to offer the new crop of Morocco seed although the yield is reported to be large. *Coriander* sells slowly, and prices are unchanged, although it is now confirmed that the present crop in Morocco is very small; old seed is selling at 10s. 3d., and last year's at 11s. per cwt. *Cummary* is easier, rain being reported in Turkey, with the result that the crop will be secured; the quotation on the spot is 30s. to 31s. per quarter, according to quality.

SHELLAC.—Quiet, but steady. On the spot small transactions have occurred at unchanged rates, including fair orange TN at 60s. For August delivery a sale of 100 cases TN was reported on Wednesday at 61s. 6d. per cwt.

SODA SALTS.—Caustic, 70 per cent., 10l. 15s. to 11l. per ton spot, and 60 per cent., 9l. 5s.; Liverpool, 76 per cent., 11l.; and 70 per cent., 10l. 5s. Crystals in barrels are 60s., and in bags 57s. 6d. ex ship or Crescent Clyde wharf; Liverpool, 62s. 6d., f.o.b. Hyposulphite, 8l. 5s. per ton in kegs, spot. Prussiate $5\frac{1}{2}$ d.

SPICES have been very quiet this week, and with no public sales, as usual at Whitsuntide, transactions have been small, and there is little to record. Cochin *Ginger* is steady at 32s. per cwt. for fair washed rough. Japan is quoted at 25s., and Bengal at 27s. 6d. per cwt. Zanzibar *Cloves* are firmer at $3\frac{1}{2}$ d. per lb. for June-August delivery. Pepper is in very little request, but prices are maintained at $6\frac{1}{4}$ d. per lb. for Singapore black, and at $8\frac{7}{16}$ d. for Penang white.

SULPHUR.—Sublimed Sicilian flowers is quoted at 5l. 16s. 6d. per ton, c.i.f., and roll in barrels 5l. 7s. 6d.

VALERIAN.—Small sales have been made this week at 46s. per cwt. spot. New crop for November shipment is quoted 28s. to 29s., c.i.f.

VANILLA.—Reports from Bourbon state that the prospects for the coming crop are very poor, and prices will be higher. Stocks on the Continent are reported to be low, Tahiti beans having practically sold out.

WAX, JAPANESE.—Firm, at 29s. 6d. per cwt., c.i.f.

Annatto from British Central Africa.

In reply to an inquiry from British Central Africa regarding the prospects of annatto, the Crown Agent for the Colonies, after examining samples of seeds, paste, solution, and powder from that colony, regrets that shipments cannot be encouraged, as the quality compares unfavourably with that of Ceylon. The seeds forwarded were of very poor colour, having apparently been packed in a damp condition, and would not be worth more than about 1d. per lb., if that. The paste is said to be bright, but not of good strong colouring quality. It is impossible to estimate its value, but the Crown Agent recommends a small consignment for the purpose of testing the market. Good Ceylon paste is worth 1s. to 1s. 3d. per lb. at the present time. Shipments of solution and powder are not recommended, as they would not be in favour. It is well known in drug circles that the annatto-market has been depressed for some time past, and that there are large quantities of Ceylon seed available on the spot which are only worth about 2d. to 2 $\frac{1}{2}$ d. per lb. The B.C.A. planter must pay more attention to colour if he wishes to compete successfully with Ceylon.

Trieste Gum-trade.

The Board of Trade have recently received through the Foreign Office the copy of a despatch from H.M.'s Consul at Trieste, stating that the restricted supply of Kordofan gum has been felt in the Trieste market. The price quoted is 200 kr. per 100 kilos. The price is tending higher, owing to the fact that there are no fresh arrivals. News from Senegal shows that the crop there was not very abundant; for this reason, as also on account of the firm prices for Kordofan gum, the Senegal qualities keep at high prices. At present arrivals of different qualities (Fahmi, Scherky, Littl) from the Red Sea, as well as those of Ghezireh, which during last winter used to arrive regularly, have ceased. Gums from India (Cawnpore, Amrad, Karachi, Madras) are also very firm, on account of the present abnormal condition of the country.

Turpentine Erratic.

The course of the turpentine-market this year has been one of the greatest uncertainty, as although the imports into the United Kingdom for the past five months have been heavier than those for the corresponding period of 1899, the increasing demand for immediate use has prevented any accumulation of stocks. In these circumstances speculators have almost entirely controlled the market, and of course they have made the most of their opportunities. In July last the price of American oil of turpentine was 30s. per cwt., in October it was 39s., after which, by a series of advances, it stood at 43s. 6d. in April of this year, and 44s. 6d. to 44s. 9d. in May. Now, however, it has fallen to 41s. 9d., and its future course is equally likely to be mastered by sudden fluctuations, until something definite is known regarding the extent of next season's shipments from the United States.

Alizarine Convention.

The German Association of Alizarine Manufacturers (a recently formed combination, organised for price-fixing and general protective purposes) has just arranged an advance in the quotations of the dyes produced by the associated firms, running as high as 30 per cent. in some of the dearer descriptions of dye-materials. Further, the concern of the Meister, Lucius & Brünig Dye Manufacturing Company (Höchst-on-the-Main) has, in view of the high level of coal prices, just made arrangements with an electrical company in Augsburg for the utilisation in the Meister works of a portion of the electric power generated by the Augsburg Company. This electrical energy is to be used by the Meister, Lucius & Brünig Company in one of their new works, which is to produce partial derivatives and materials for subsequent treatment in the processes preparatory to the completed dyewares. The works in question are to be erected in the neighbourhood of Augsburg.

A Hint for the Britisher.

It is stated by a firm of bankers in Valencia that some 50,000 tons ammonia sulphate, 20,000 tons soda nitrate, and 8,000 tons lime phosphate are annually imported into Valencia from Great Britain. Writing on this subject to the local American Consul, the bankers believe that the United States could easily compete for the supply of these articles to Spain, and once the trade is started they are prepared to take full steamer-cargoes of 3,000 to 5,000 tons, for which cash would be paid against documents. Full particulars of how to set about the business are given in the letter, but the requirements appear to be based on the methods employed by Great Britain in this particular industry.

Wax and Honey in Hamburg.

The British Consul at Hamburg states in his annual report for 1899 that the imports of bees'-wax increased by 10 per cent., the total amount imported being 1,376,000 kilos., as against 1,262,300 kilos. in 1898, thus showing that Hamburg is becoming a leading market for this product. The imports of Carnauba wax were 305,000 kilos., or only half of the quantity imported in 1898. The decreased imports were due to the small crops in Brazil. Throughout the year the trade in Japanese wax was very limited on account of the unsatisfactory quality. The importations of honey to Hamburg in 1899 were about 600,000 kilos. less than in the previous year, and amounted altogether to 2,178,000 kilos. More than half of this was imported from Chili and Peru. The Consul reports that many complaints continue to be made in the trade regarding the increasing competition of artificial honey, but it is hoped that the measures taken by the principal users of the genuine article in Germany will result in obtaining the prohibition of the sale of products under the name of honey which are only imitations.

Coming Events.

Monday, June 11.

Society of Chemical Industry (London Section), Burlington House, at 8 P.M. (1) "The Maintenance of Aëration as a Standard of Purity of Sewage-effluents," by W. J. Dibdin, F.I.C., F.C.S., and G. Thudichum, F.C.S.; (2) "The Composition and Determination of Cerium Oxalate," by Frederick B. Power, Ph.D., and Frank Shedden, B.Sc.; (3) "The Production of Nitrate of Soda in Chili," by F. G. Welch.

Tuesday, June 12.

Royal Photographic Society, 66 Russell Square, W.C., at 8 P.M. Mr. H. L. Aldis, B.A. (Cantab.), on "The Construction of Photographic Objectives (Mathematical Investigation)." The exhibition of photographs by Dr. P. N. Emerson may be viewed on presentation of visiting-card between the hours of 10 and 4; Wednesdays, 10 to 8.

Royal Colonial Institute. Evening meeting. Sir Sidney Shipard will preside, and Mr. Lionel Phillips will read a paper on "The Outlook in South Africa."

London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from January 1 to May 31, 1900, and to the stocks on May 31.

	May		Stocks		1900	
	Landed	Delivd.	1900	1899	Imp'd.	Delivd.
Aloes cs &c.	233	329	2,850	2,322	1,031	845
" gounds	1,418	1,216	202	1,025	1,648	1,446
Anise, star cs	—	—	54	77	—	2
Balsams csks &c.	151	206	295	997	620	749
Calumba bgs	373	44	505	476	487	207
Camphor pkgs	665	651	1,826	4,328	2,719	2,672
Cardamoms cs &c.	838	411	3,012	2,315	3,162	1,859
Cinchona pkgs	3,241	1,435	15,616	16,449	11,768	12,251
Onbebs bgs	—	5	1,649	1,867	—	55
Dragon's-blood cs	11	10	96	46	31	60
Galls pkgs	723	1,249	1,741	2,604	3,025	2,963
Gums—						
Ammoniacum ..	2	13	57	88	9	20
Anini & copal ..	4,481	3,547	8,670	15,316	14,070	16,023
Arabic "	938	1,748	9,097	11,560	6,368	8,944
Asafetida ..	29	229	675	638	621	649
Benzoin "	294	291	1,409	1,274	1,630	1,351
Damar "	374	422	3,647	3,504	1,307	2,004
Galbanum ..	—	—	14	18	—	2
Gamboge	37	32	259	272	42	91
Kauri tons	71	155	1,488	1,340	875	1,033
Kino pkgs	6	11	27	106	20	38
Mastic "	—	3	20	17	—	11
Myrrh, E. I. ..	25	45	259	349	99	150
Olibanum "	102	607	2,126	3,142	3,886	3,445
Sandarac	3	99	517	742	565	398
Tragacanth ..	764	944	3,542	1,650	5,793	3,285
Ipecacuanha, Rio bls	99	103	149	42	298	351
" other kinds pkgs	31	68	113	21	208	211
Jalap bls	—	33	281	231	39	68
Nux vomica... pkgs	303	143	554	523	792	251
Oils—						
*Anise cs	—	21	137	212	—	50
*Cassia "	25	5	108	70	50	16
Castor pkgs	167	161	669	953	669	952
Cocoa-nut .. tons	325	57	683	183	944	553
Olive csks, &c.	142	266	920	974	944	1,051
Palm tons	6	3	3	14	9	13
†Quinine sulph... lbs	5,398	3,102	216,552	157,683	62,633	20,646
Rhubarb chts	22	67	989	1,331	169	480
Sarsaparilla .. bales	62	138	330	374	424	491
Senna bls &c.	91	519	2,059	398	3,475	3,044
Shellac, all kinds cs	3,269	4,886	41,324	47,896	21,321	21,596
Turnerie tons	85	106	445	291	508	217
Wax, bees' pkgs	565	559	1,126	1,150	1,912	2,316
" Japan cs &c.	313	34	554	463	478	431

* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Dock's.

The statistics of goods lying at City Commercial Wharf are not included in above returns.

NOTE.—Aloes in cases moved off fairly well in May, the deliveries exceeding the previous month by 200. The deliveries to date, however, are small compared with previous years. Gourd-aloes was in demand last month at low prices, and we notice 1,400 odd were landed; the stock, however, is exceptionally low. "Balsams" also show a small stock compared with last year, and deliveries were on a larger scale. Less camphor was taken out of the warehouses last month, but the figures given do not embrace all the wharves. The stock is less than half of what it was at the corresponding period of last year. The bulk of the recent heavy shipments of nux vomica appear to have gone direct into consumption, as the stock is only 554 packages. The business in ipecacuanha is quite a feature of the month, and the deliveries of Rio are just about double those of the previous month. The stock of both kinds is by no means large, and, if the importations are maintained at about present rates, there is not likely to be a decline. Indeed, the two importers of Rio root seem to have a grip of the market, as for some time the price has been well maintained, and it is hardly likely that they will allow shipments to be excessive. Since the beginning of the year the stock of quinine in the warehouse has been gradually increasing. It is now 3,464,832 oz., against 2,522,928 oz. at the same time last year. The landings were 66,112 oz. less than last month, and the deliveries show a slight increase of 2,624 oz. As regards cinchona, we have an increase of 1,806 packages in the stock compared with May, while the deliveries for the month were 1,190 packages less and the landings 655 packages more. The deliveries of asafetida are good, but they mostly represent low grades which have been forced off.